11/22/2426

1 John Allen Smith settles the leather patches on his corduroy jacket comfortably into place on the table in front of him, picks up document #1510112226 from site #101122264143 and begins to read:

11.22.2726 (Earth Temporal Reference)

2 Dolph Waters (a Homo varietas cetacea-chloroplast) is about to begin a Telling. An audience of forty posthumans have gathered for this rare laryngeal communication event, including distinguished members of the knowledge teams of the most numerous subspecies – the ariels and the arboreals – as well as a few spacemods.

3 Dolph is wearing ground-based attire out of respect for the location and traditions of Tellings, including dark, loosely fitting stretch pants and a brilliant turquoise tunic that contrasts nicely with the green tint of per’s photosynthesizing skin. Per’s shimmering hair is swept up in a peak to emphasize that per’s biogenic gills have recently been enhanced with the latest nanelectronic implants, which are made of a cerametal alloy with a midnight blue sheen. Dolph’s forearm transceiver is also conspicuously bared, as it is the latest model. The Explorer’s Cross dangles from a brilliant golden chain around per’s neck. The hum of transceiver-mediated communication fades in the room and Dolph Waters begins to Tell:

4 “I am so aroused to have this Telling for you on behalf of my knowledge team.” For several days, Dolph has diligently practiced using the organic speech apparatus with which per was born, but the regular reliance on the more efficient transceiver for communication that is common among most of the Homo sapiens varieties shows in the muffling of most consonants. Dolph clears
per throat and stretches the muscles around the mouth, and continues.

5 “I will Tell you first of our discovery of the artifacts and then of the conclusions of our study of them.

6 “My partners and I were conducting a Zalvin-assisted exploration in the sea-caves off the Southeastern Coast of Northern America (at 24• 37’ N 77• 48’ W) when we stumbled across an odd pile of ancient wreckage. We immediately encased it in plasflo-wrap to avoid further damage and began to move it carefully to the Middle Sea Laboratory, releasing pressure slowly from the plasflo-wrap through osmosis over a course of days as we moved it gradually upward and northward to the Lab. At the lab, it was necessary to construct another docking bay around it before detailed research could begin, because the plasflo-package was 355 square meters (the size of five waterpolo baths strung together!).

7 “By this time, external analysis had confirmed that this was an ancient ‘airplane.’ For those of you who are not specialists in the pre-Divergence eras, an ‘airplane’ is a primitive mechanical device used by Homo sapiens sapiens for moving self and materials through the atmosphere to shift geographic locations.

8 “As best as the knowledge team could determine, this airplane had crashed over relatively shallow water, and much of it had been immediately swept into a cave, the conformation of which had soon changed (perhaps due to the impact of Sagan’s Comet) and thus preserved from strong ocean currents.

9 “As you can imagine, we were enormously excited when we were finally able to breach the plasflo-wrap and examine the artifacts directly. But we lifted piece after piece of metal in perplexity. How would we ever make sense of this wreckage? If we had known more about pre-Divergence Homos we might have been able to make sense of the highly polished wreckage. But given how little remained of the records from that era after the great solar flares, it was almost impossible to figure out what the pieces of metal once had been.

10 “Just as our disappointment grew to despair, however, we located a small box that appears to have been a carrying case. Within that case, a wrapper had somehow managed to keep the contents air and watertight for 700 years. Yes! we were able to date the contents to that pre-Divergence period because of the treasure
trove of data it provided.

11 “The contents of the box appears to have been associated with a person by the peculiar name of Heavenly Gutters. Of course, our translation of that may not be exactly right, because our grasp of early Internationalish still has its rough spots, especially when it comes to their naming practices. In any event, the box contained a ‘videotape,’ which was a device used for recording two dimensional moving images with accompanying sound, also several books (get this – made of paper and cardboard!) and a pile of primitive computer data storage chips. Although the chips were cumbersome for the relatively small amount of data they stored, altogether this trove literally doubled the infobits we had about pre-Divergence Homos.

12 “So what does this stored data tell us?

13 “Obviously we are far from finished with analyses. The first challenge was simply to understand the significance of the materials. We were enormously confused for a long time, because these early species mixed True Tellings and Imaginings in ways unusual to the modes of Thinking-Together that are allowed to us by the transceiver. We finally determined that the videotape contained an elaborate Imagining about the transformation from Homo sapiens to post-Homo sapiens. It was named GATTACA. Two of the paper books were Imaginings that shared a title of Star Trek, and they also imagined post-human futures. The other book, written by someone named ‘Foucault’ (we can’t decipher that name) talked a lot about post-humanism.

14 “For the rest of this Telling I will explain how we think the pre-genemod Homos thought about the impending arrival of the Divergence and their modes of thought in general, and save other topics for later Tellings.”

15 “That is,” Dolph thought to perself, “if I ever do another Telling! This is such an exhausting way of communicating! How in the world did they ever accomplish anything in science when they used oral conferences?” Per stretched the mouth again and continued.

16 “The Homo sapiens sapiens (for that is what they called themselves) seemed to realize that the Knowledge was growing in a way that would produce the Divergence, but their understanding of it was shockingly spotty. At least, the Foucault apparently believed that the divergence would be superior to the ‘dominant hegemony’
(by which we think per meant the way of Being that had existed for approximately two hundred years on two continents). However, per’s discussion of post-Humanism made absolutely no mention of the biological transformation of the species! The Foucault accurately predicted the breakdown of solitary consciousness and of -gendering, for per wrote about the ‘end of man’ and the ‘social determination of consciousness.’ This suggested that the knowledge teams had in mind the use of transceivers. But the transceiver was dependent on organo-electronic modifications that are not mentioned in any other of the works in the collection. And we do not understand how per thought that the breakdown of bi-gendering would happen without genemod. That is truly baffling.

“The Foucault’s silence on the genetic transformation of Homo sapiens sapiens into Homo varietas is even more perplexing given the attention devoted to genemod in the rest of the works in the Gutters’ collection. One of the Star Trek books refers extensively to genetic modification, though it treated the use of genetic technologies as the source of great strife and even referred to purported ‘Gene Wars.’ In fact, almost all of the materials that recognize the biological nature of post-humanism treat it as an undesired event! According to Heavenly Gutters’ notes, there was a Nelkin-and-Lindee team and a Katz-and-Rothman team who were both very influential, and both argued that genemodification would lead to a greater level of illness in the population! They suggested that some people would not want to be genemod (if you can imagine that), and that those who did not would be treated badly.

“While the Foucault treated post-humanism as good, these knowledge teams thought of it as anti-humanism. It makes me shudder to think that the Divergence might not have happened if these primitive beings had had their way. You and I, and all our procreants, would not be here today. There would be only the primitive Homo sapiens sapiens, condemned to tread the surface of this planet in a second dark age, with their short lives, limited communication abilities, and diseased, limited bodies. (That is, if they could have survived the Great Heat and great solar flares!) There would be no life on the other planets of our solar system, or those nearby. We are fortunate indeed that Knowledge is more powerful than narcissism.

“My Telling cannot end there, however. For the discovery that Homos at the dawn of the Divergence saw these changes as great
looming evils demands us to wonder about the thinking mechanisms of these *Homo sapiens sapiens* (humph!). Among Heavenly Gutters’ extensive notes (thanks be that per was such a careful note-taker and packer!), there are some strong clues though, of course, we cannot posit Knowledge QED of the minds of an extinct sub-species, one whose DNA-print has been lost to the drifts of time.

20 “If, however, we correlate Gutters’ notes on a primitive textbook on genetics that per carried with per’s notes on works by the Aristotle knowledge team, two books called *Before the Analysis* and *After the Analysis*, we begin to guess their problem.

21 “(Please excuse the species-centrism, but one can only describe their thought processes with negative terms, given what we know of them).

22 “The Aristotle’s statement of how thinking was to be conducted was very linear and gridlike. Apparently the mode of thought in the pre-biotic era resembled the simple mechanical processes such as gravity and movement on the scale of an organic, sentient monod. We suppose it makes some sense that *Homo sapiens sapiens* had thought structures tailored to the immediate functional requirements of the entity for survival. This may have been almost inevitable in an era where Natural Selection was the only design principle for Beings (as opposed to the post-Biotic era, where Imaginings and Knowledges might guide design beyond pre-existing functionalities).

23 “It appears, however, that the coming of the biotic era introduced new potentials for thought. The operation on the microscopic scale and the focus on biology opened the possibility for thought structures that were not governed by monod level sentience and inorganic structures. In fact, Gutters’s notes refer to the rise of ‘post-structuralism,’ though these are confusing and do not seem to relate directly to biotic thought. Per’s notes also mention ‘Chaos theory’ and ‘Complexity theory’ which refer to dynamic structuring and non-grid, non-linear thought structures. Again ‘Chaos theory’ and ‘Complexity theory’ are only proto-components of biotic thought. They do not account for the full range of organo-dynamism, but they do constitute a substantial move up from mechanistic thought.

24 “In any case, it is intriguing to read the primitive genetic primary school teaching book in light of the incipience of biotic thought.
The teaching book, called *Genes IV* and written by Lewin, is clearly trying to convey the Knowledge of genetics (as limited as it then was) in the approved forms of advanced Aristotelian (that is, mechanistic) thought. However, several chapters of that book break through into incipient bioticism, in spite of the author’s intentions. It appears that even the scientists of the era were still not fully aware of the broad implications of genemod and bioticism. It is, of course, perplexing that both scientific and post-humanistic scholarship in that era was not even as sophisticated as the Imaginings of the era with regard to genemod. But so it appears.

“Dear friends, this Telling has tired me, but though my Telling must end, the Knowing has no ending, for much more waits to be done, and a Telling is only a fragmentary sharing. You will undoubtedly want to turn to the data bodies to absorb the richness of this treasure upon which we are so grateful to have stumbled. Thank you for sharing your presence with us. On behalf of Knowledge Team Dolphinus 2, I, 6,500.1, live long and prosper.”

John Allen Smith puts down the document. “Humph!” he says out loud. “Another silly speculation of the 21st Century,” he thinks to himself, as he heads off for another cup of tea. But as he turns toward the faculty lounge, he begins to mull and to categorize what he has read, in good scholarly fashion.

“This account pretty much follows the psychological pattern for essays of its genre, which have already been well documented. Alas, nothing new to write about here. In the pre-reflective era, when new scientific discoveries were made, technological cultures imagined their implications in romantic and even fantastic terms. Some of the accounts were utopian and some dystopian, but they almost always centered on the direct physical impact of the technology on human nature, thereby expressing and repressing the species’ inherit angst over its mortality and countless other frailties.”

“Actually,” Smith continues in his inner monologue, “this is quite an archetypal case of the utopian genre. It exhibits an absolute degree of the neglect of the materiality of being that generally pervades technological utopianism, ignoring the costs and trade-offs of bio-modification. Indeed, instead of remaking the species into ‘posthumans,’ genetics has primarily provided some marginal utility in agriculture and constituted a powerful tool for medical
research. But as of 2426, there still has been no mass adoption of genetic technology for human genetic selection or modification.

29 “The early speculators ignored the fact that natural evolution had taken millions of years to evolve the resistance of organic systems to foreign DNA. Overcoming those resistances is simply too costly. There are better ways to treat illness. And merging genomes is too complicated. The benefits just don’t justify the costs. It’s a lot easier to build mechanical augmentation and protection.”

30 Smith turned the corner, and put his hand out to open the oak-paneled lounge door. “On the other hand,” the thought hit him, “this manuscript does correctly critique the failure of post-structuralist theorists to engage issues of human biology with any depth and systematicity. The post-humanists critiqued the biological sciences, and they denied the significance of biology, trumpeting the significance of their own venue of operations – the cultural. But they refused, adamantly, to incorporate biology into their theoretical account of humans and human systems. I don’t think anyone has reported on that yet.”

31 “Yes! That will provide the hook I need for my presentation at the International Society of the History of Post-structuralism next month.”

32 As he dropped his tea-bag into the cup of hot water to let it steep, he reached for the newspaper. The headline read, “FOUCAULT’S COMET TO IMPACT EARTH: PRESIDENT URGES NO PANIC.”

Acknowledgments: I thank an anonymous reviewer and Bruce Railsback for their feedback on earlier versions of this manuscript. I also thank the audience at the National Communication Conference 2000 for their indulgence of my performance of the role of Dolph Waters. I appreciate their willingness to stretch out of the normal scholarly genre into a mode that is unfamiliar. This piece employs neither a scholarly genre nor the science fiction genre, but a hybrid of the two, undertaken for the purpose of reframing old ideas and looking at them from a different perspective, but doing so within an academic community with shared literatures, vocabularies and problems that are somewhat more narrow than those of interest to the larger audience of science fiction writing.
The notion that human animal hybrids might be a good thing was first driven home to me by Victor Milan’s *Star Trek*® novel, *From the Depths*, though I had previously encountered it in Brian Stableford’s *Future Man*. I owe the truly radical concept of photosynthesizing skin to Nancy Kress’s *Beggar’s Ride*, and I borrow the use of the non-gendered pronoun “per” from Marge Piercy’s *Woman on the Edge of Time*. Wouldn’t it be wonderful if this little innovation could pass from science fiction into general usage?