



1999 MRS Fall Meeting Presents an Opportunity to Help with Planning Materials Microworld

Sunday–Wednesday, November 28–December 1
Hynes Convention Center, 2nd floor

Come give your suggestions for exhibits and educational materials for this proposed travelling science exhibit, and see current plans in progress.

POSTERMINARIES

Y20K—Looking Back

SS: Greetings! I am so happy you accepted my invitation. You appear understandably bewildered about why anyone would suggest an off-net encounter and most likely also about who in the worlds I am. Right?

MRSB: Right! In fact I am also having trouble understanding your dialect—I can't quite place it.

SS: Well, I'll speak slowly. You folks from *MRS Bulletin* never were able to keep up with me.

MRSB: Subscribers who move frequently have never complained of this before. Your global locator would redirect our transmissions instantaneously.

SS: I have moved around a lot, it's true, but have never actually been a subscriber. As I recall, you did occasionally mail complimentary copies to me.

MRSB: MAIL!? You mean MAIL PAPER!?! You are clearly confused. That process is so archaic that any archived physical copy disintegrated umpteen centuries ago or even before that.

SS: *Before indeed!* I had better introduce myself properly. As you must have scanned at my portal, I am currently labeled AnthroPedagogue 9940.¹ I have been teaching Archaeosociology (AS) at the Interlunar School For Advanced Terrestrial Studies for the last 59 sidereal years (SY). I invited you here because you, that is, the *Bulletin*, represent a discovery of sorts. Anachronistic as the *Bulletin* may be, in my field finding you is quite a coup.

MRSB: I certainly am happy for you, but to be frank, I find no record of you in

¹ Leading 1's having been suppressed, of course.

Bulletin archives. Is this someone's idea of a joke? *Bulletin* policy prevents us from being party to any deception. Perhaps I should go.

SS: Not so fast Mr. *Bulletin*. Your impatience with receiving information at voice rates is clear, but indulge me, will you? I am not in your database because the last time we spoke, you didn't have a database and I didn't have a number.² Even if you had had a database, it would never have survived. The ancient data wars destroyed all but those hidden in the orbiting hard copy and I'm sure the *Bulletin* was not important enough to be slung into storage there. That's no great loss though. The *Bulletin's* reputation would not have been fairly represented. Were it not for relics like me, there would be no one here to undo the spin, and I don't mean gyroscopic, of the revisionists. Suffice it to say that the *Bulletin* has survived, and that finding alone will earn me accolades.

You see, I specialize in the five pre-grand-amalgam millennia³; years 0000 through 4999 AD by that era's reckoning. My students' next assignment will be to trace the temporal trajectory of some artifact of that epoch from inception to demise and hypothesize a reason for the latter. Their reports are to be composed in the language of the period.⁴ To illustrate the assignment, I must trace something myself.

² Well, that's not entirely true. I did have a number called a Social Security number which I often include in my lectures on "Oxymorons of the Twenty-First Century."

³ Before amalgamation, there were a variety of languages, nationalities, economic systems, religions, etc.

⁴ They will therefore have to make extensive use not only of the historical record but also of transposition codes in the pre-amalgamation babellings archives where, if I say so myself, many words I coined are to be found.

My professorial prerogative permits me to use an example in a tongue I already know. I therefore chose the ancient *Bulletin* because I had been familiar with it in those days, and I still have an astounding command of that language. You did say you detected a slight accent, did you not?

MRSB: Just wait a Martian minute! You would have me believe that your association with the *Bulletin* dates back fifteen thousand years? Please show me to what passes for an exit from this loony bin.

SS: Truth be told, you're nearly right. Our connection dates back to the twilight of the second millennium AD, some eighteen thousand SY ago. I was known to your ancient predecessors as Prof. I. M. Science Sage and frequently donated my wisdom, admittedly meager in retrospect, to your pulp and pixels publication. I was a terribly interesting fellow then. Now, of course, I am far more fascinating, being only one of a small cadre of multiple rejuvenates who chose to skip so many centuries (ten, to be precise) between visits. But you'll find no clone here, not that there wasn't a huge demand for my sequence. I'm the genuine and sole article.⁵ My story is not nearly as amazing as yours, however. As I was saying, I chose the *Bulletin* for my example, and lo and behold,⁶ I discovered to my amazement that it had survived to the present. It's the only example anyone has ever found of a surviving synthetic inanimate entity from that time. Why, it ranks right up there with unearthing the first Neanderthal. Would you be willing to come as an exhibit to my next lecture?

MRSB: Sure, why not. It couldn't be any more bizarre than this conversation. But,

⁵ Aside, of course, from the few obligatory replicated organs here and there.

⁶ A catchy phrase from the ancient theocracy.

in return, I have a few questions for you. For example, what was the *Bulletin* originally intended to do? Who downloaded it? And, well...umm..., what does MRS mean anyway?

SS: I see we have a lot of catching up to do. When I said the *Bulletin* was an anachronism, I wasn't kidding. MRS was the monogram of something called the Materials Research Society. Let's see, how could you possibly grasp this concept with no contemporary points of reference. My AS101 course covers the decline of all physical sciences as they ran out of problems to solve—as Moore's Law saturated, as the ultimate strength of every material was realized, and as everything could be simulated and designed so well and fast on the exabyte machines that failure-free engineering was the norm.⁷ Materials research was sort of a hodgepodge of the ill-fated disciplines of physical science. In the second millennium, though, these pioneers were plying unknown research territory.⁸

It's hard to imagine now, but those MRSers found that by associating in cliques called Societies, communication of their work was enabled and even energized. You think meeting me in person is unusual? Those folks actually gathered by the thousands, *in person*, to exchange at infinitesimal rates many tidbits of data pertinent to these now long defunct disciplines. By the end of that millennium, they thought they were close to "webifying" their world and would be able to do everything remotely. That didn't fully happen until I had been thawed for the fourth or fifth time, but it was that watershed success that spelled the end of all the societies with a capital S.⁹

MRSB: Gee! In that case, perhaps we should change the name of *MRS Bulletin* if MRS is no longer meaningful.

SS: Don't waste your time. They tried several times to devise a new name for the old *Bulletin* even when they knew what MRS meant, but could never find that perfect consensus appellation. You know, if I didn't know better, I'd assume the reason

⁷ I can't remember the last time someone was convicted of committing engineered obsolescence.

⁸ They had no idea that all their efforts to safely store nuclear waste, to clean up the environment and eliminate industrial pollution, to understand the cosmos and populate a tiny corner of it, to harness new sources of energy, and so forth and so on, would be obviated when those precocious genomists introduced selective discretionary human speciation.

⁹ And some would say with a lower case s as well!

you still exist is that you are still waiting for that consensus.

MRSB: But it seems that you do know better. Why do you suppose we still publish?

SS: Actually, when the physical scientists saw the writing on the wall,¹⁰ not all went quietly either into the iniquity of obsolescence or into forced reprogramming as life scientists. Many went underground.¹¹ Publications that were blatantly physical like *Physics Today* were banned and only the more obtusely titled *Bulletin* remained to be anointed as the voice of the Impedance.¹² I, of course, helped as much as political correctness allowed. Apparently the *Bulletin's* low profile accounts for it coasting unnoticed into the present. Sometimes I wonder what my comrades in the Impedance of yore would think of our present.

MRSB: Why? Are there phenomena now that their predictive algorithms did not anticipate?

SS: Whoppingly huge phenomena, I'd say. They unfortunately were not blessed with our completely foolproof deterministic forecasts. They did well to anticipate with 200% error bars what two decades might bring. They buried time capsules to be opened after only a century had passed, as if that were any time at all. No, even though they had fifty thousand years of human history to reflect on, they hadn't the technology as we do to make sense of it. They might not be too surprised by the grand amalgamation¹³ of language, nations, cultures, and religions or the early depletion of fossil fuels. Also, they had already anticipated massive data storage, optical computing, and some gene manipulation. But the obsolescence of their quest for knowledge—never that! And, the ultimate solution of tailored differential bioadaptation to life in polluted cities, in low gravity, in post-ocean-dialysis water habitats, in post-Yucca-Mountain-decommissioning radiation fields, not to mention in extended suspended animation, would amaze and horrify them.¹⁴ I

¹⁰ Of course nobody actually wrote by that time and all the walls were graffiti-proof anyway.

¹¹ Actually under water, but that's another story.

¹² Leave it to the physical types to decide that their movement was so complex that "impedance" was a more accurate term than "resistance." That was, as it turned out, sadly prophetic, for over time the movement did become fully imaginary.

¹³ They originally called it the "grand unification," until someone exposed that term's ancient physical connotation.

¹⁴ I do recall, however, that I had many friends whose personalities presaged each of these variants.

am certain they would miss the pointless battles fought and artificial barriers erected between their institutions, political subdivisions, and disciplines.¹⁵ As for people, they would only recognize those like me who retained their original shell and those who checked the throwback option on their family's genetic preference form.¹⁶

There *is* one thing they would certainly find comforting and familiar. That's your latest *Bulletin* transmission. They too got a bit overwrought when calendaric milestones cropped up. Shortly before my first suspension, they were making a really big deal about the coming of the third millennium just as you are overplaying the coming of the third manium.¹⁷ The manium mania now abroad would not surprise them at all.

MRSB: They couldn't possibly have been so dependent on data streams that they would have been prone to a disaster anywhere near as serious as the Y20K problem we face. Why the designers of today's machines left the hardwired leading "1" in place that patched the Y10K crisis, I'll never understand.

SS: Frankly, I find the whole dilemma rather reassuring and I fully expect to see an analogous panic set in before Y200K arrives. This phenomenon is a symptom of the imponderability factor that has lurked just behind the façade of progress and always will, no matter how far we think we've come. Once called free will, it is the stochastic unpredictability of any one individual's behavior that makes us who we are. Sure, we can calculate the average behavior of the ensemble with actuarial precision, but there is simply no accounting for our own unique deviations from the mean. Why don't you reproduce those pearls of wisdom in your *Bulletin* to make up for the interview I declined at the threshold of Y2K when I was too busy stocking up on canned food and printing out my bank statements on real paper.

To be reported by E.N. Kaufmann

¹⁵ They would, in fact, find our substitution of mutuality for adversarialism, in a word, wimpy. (See Gordon Fellman, *Rambo and the Dalai Lama: The Compulsion to Win and Its Threat to Human Survival*, [State University of New York Press, Albany, NY, AD 1998], after uncounted reprints, of course.)

¹⁶ The latter group undoubtedly constituting the bulk of your subscribers.

¹⁷ My progenitors had no convenient word for the "ten-thousand things" (of Lao Tsu's *Tao Te Ching*) or ten thousand of anything for that matter, so the prefix *man-* derived from the ancient Japanese crept into the lexicon. (*Manium* is apparently a lazy contraction of the unwieldy *mannennium* that, thanks to amalgamation, has survived to this day.)