Andrew Glassner's Notebook

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The Triangular Manuscripts

Andrew Glassner

Microsoft Research ast week I got a call from my old friend, Professor Stan Conversion. He'd just bought a new boat, the Wave Interference, and invited me to a cruise on Lake Washington. That Saturday the weather was beautiful, and as we sailed around the islands of Puget Sound, he handed me a letter.

"This arrived recently from a former student," he said. "What do you think?" I settled back in the deck chair and read. "Dear Stan," it began.

"A month ago my husband and I were shopping for antiques in Port Townsend when we found a wonderful old dresser in a dusty, out-of-the way shop. It was kind of beat up, but Dan thought with some work it could look lovely. When we asked the store owner how much it cost, he suddenly looked very frightened and said that he thought he'd gotten rid of the dresser long ago. Not 'sold', but 'gotten rid of.' He seemed quite upset.

"Then he told us to leave, and to forget about the dresser. He said it was haunted! He told us that when the spirits were angered, the drawers wouldn't close properly, and if you pushed harder, you could hear the sound of their withered, ghostly bones cracking in agony. Well, of course Dan and I laughed it off and insisted that he let us buy it from him. He warned us again, but we persisted. I think he finally sold it to us just to get it out of his store.

"We started in on it that afternoon, and sure enough we found that after removing the bottom drawer, we couldn't push it all the way back in again. And we actually did hear a strange crunching sound when we tried to force it shut! Taking off the back of the dresser, we found a large brown envelope full of old papers, caught on one of the drawer runners. Pushing on the drawer simply caused the papers to crunch together.

"Dan and I opened the envelope, and found pages of what looked like parchment paper. They were old and brittle and some of the ink was faded, but we could make out some of the words. I immediately realized that if anyone could do justice to these aged sheets, it would be you. We are putting them into this box along with this letter. I know you'll do the right thing."

The letter continued with a few personal anecdotes, and then closed. I turned to Stan and asked to see the papers. He handed me a few, and I was immediately intrigued.

Each page, about the size of a newspaper sheet, was hand-lettered in stylish copperpoint. The papers con-

tained some line drawings, but many were so badly smeared that I couldn't figure out what they represented. The pages were unsigned. We have no idea who wrote them, though some historical references seem to indicate they were written around 1780. The only clue to authorship is three small triangles in the bottom-right corner of each page, like this: $\Delta V \Delta$, so we have taken to calling them the Triangular Manuscripts. They all seemed to deal with inventions of various sorts, one per page, like a laboratory notebook.

The text had been processed through a fairly elaborate cipher, which Stan had figured out. The cipher key changes every few letters, so recovering the original text is a slow process. Stan deciphered one of the shorter pages on his own, and together we worked out two more.

In this issue of *IEEE CG&A*, the annual index takes up extra pages and squeezes the amount of room available to columnists and other departments. Since our work is still new and results are few, it seemed like a perfect time to share with you the partial results of our investigations. With Stan's permission, excerpts from the papers appear below. I did only the most minor editing possible to make the text available to modern readers—I preserved the original spelling, grammar, opinions, and even errors in the interests of historical accuracy.

The Eufonious Insektothon

Wonderful Strange are Animals that Lyte of their own Akkord. The Fyre burns Inside them, causing those that are Airborne to Ryse through the Heat of their Bodies, in akkordance with my Principle of Ethereal Transmutation. Such Lytening Bugges, or Fyreflys, are often to be seen late of an evening about Country-syde Manors. Their Purpose is as yet unklear to me, tho it seems more than likely they Promote the Development of Lytening from the Skye, seeing as they deposit small Bits of Fyre into the Air wheresoever they Travel. Such Fyre Bits, upon being Linked, do cause a Chain of Luminous Flux, leading to the Jagg'd pattern of Bolts of Lyte such as on a Stormy Nyte. As do Farmers plant Seeds in the chill of Spring, so do Insekts plant Fyre in the Calm Air of a summer's nyte, only to grow to full Lytening Bolts in the midst of Storm.

But such Animals, tho direkt'd by their own Instinkts, may yet be Harness'd for greater Good by Man. Much as we have trained Dogs, Cats, Monkeys, Elefants, Lemurs, and if rumor be trusted, the mithikal Jirraff found

only in Afrika, so may we train these Bugges of Illuminary Fluxion.

I propose that by means of a system adapted from that used for Horses, I Teach a Collektion of these Bugges to fly through a Volumme of Space for a set Periode of Tyme. I shall use a set of Eufoniums to communikate Musikal Cues to the Fyre-making Capacities of the Creatures. Each small Insekt shall be train'd to Fly, then to Hover at an especial Pointe in Space. Then each shall be instrukted, by means of Chords both Major and Minor, to Lyte at a Partikular Moment, and then Douse. Thus do we make a Volumme of Space into a Cloude of Lyttes, each glowing at the Proper Moment, and to the Proper Deggree, such that they form a Pikture in that Space.

This Pikture may be originally Design'd within a Frame, built from simple materials such as Wood and String, and Beads upon Strings, that forms a Volumme of Space within which the Colored Beads are Strung. By properly adjusting the Musikal Chords play'd to the Creatures, we do create the Pikture in Space.

Thus do I call this my *Eufonious Insektothon*, and shall seek Patronship for the funding thereof.



Upon suksessful completion of the Insektothon, I envision a Colorized version, in which the Fyre-making Abdomen of each Animal is dipp'd in a Gelle of color'd material, which does then cover and color the Fyre thereof. Thus when the Animal does Glow, it appears with the Color plac'd upon it. Four colors are Necessary, pertaining to Earth (Brown), Air (Clear), Fire (Red), and Water (Blue). From these Four Colors may all other Colors be made, as is self-evident by Mental Introspektion.

The Lunatick's Refuge

Of late I have been considering the sorry state of the Lunatick, or Madman, as he stumbles through the World. Robbed of Sense and Manners by Harsh Birthing or Sorry Cirkumstance, he must Imitate, as best he Can, the Lyfe of Men not so Afflikt'd. Lest I sound harsh, I hasten to Assure my unknown yet assuredly Gentle Reader that all Men are Mad as may they be, but learn

by Tricks and Deceits various to disguise the Affirmity. Such Men, which inklude myself, manage their way with only Miskonceptions, Errors, and Poor Judjment to plague their days. But those truly Mad must deal with a world lacking in Meaning and Reason, and this can only be pitied.

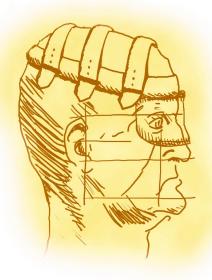
Such Men, and to a frightening degree, Women as well, though their Fairer sex protekts them from the most Bitter enkounters with the World at large, must turn to Worlds of their own Devyce. Which is to say, they invent new worlds to inhabit. Such persons visited but mildly by Madness may yet make their way as Creators for others. Such Men may as like bekomme tellers of Stories, painters of Piktures, or those who shape Wood or Clay to ends Various, Ornamental, and by turns, even Useful. For such Madness should we be Gratefull, for our world is Illuminated by such Works when turned well on the Lathe of Insanity.

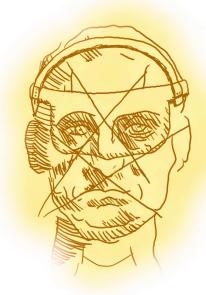
But to those more sorrowfully Bestow'd, the true Lunatick, we can but be moved to pity, and to make his Lyfe full of as little Despair as Inventable.

Upon Reflektion on the matter, I foresee a Construktion for Lunaticks which will be created to soothe their urgent souls. This Devyce shall be affixed to the pitifull Madman's Head, and due to such attachement, shall move with his Head, Mirroring its every Motion. In such respekts it is but a Hat. But it is more, for the Lunatick's Hat shall Enchant and Divert him. It shall present him with Images and Sounds which will Block those Aspekts of the World which serve only to Strain the Lunatick's faint resources. Such Images and Sounds shall Move, and even appear as Animated figures, such that they seem to Replace the World that causes such Distress. They shall appear in front of the Madman, on a piece of the Hat that does cover his Eyes.

This Majikal Hat will be a Precious Devyce, power'd by many Attendants, who shall Labor long to create Content to Amuse the Madman in Pikture and Sound. The Madman shall be Tied by the Attendants by a Chain of Power, which will hold him fast, close to the Source of the Illusionary World, and his Mobility will be Restrikted. And this shall be Good, for a Madman Confin'd is a Madman Safe. And thus shall the Madman be Sooth'd, and the Imaginary World will look and sound to the Madman as a Real World, and Restfullness will come to his breast.

But the Madman, though his World be distorted through the Lens of Damaged Sentience, still knows the World as it is. The World is not made of Ghosts and Vapors, and Beings that Float in the Air, Transparent as Glass. And thus shall the Hat be lacking. For the Piktures presented to the Madman shall appear in Front of Him, but yet not Obskure the World, for such is the way of Danger. Even the Insane are able to Step Asyde from the Kicking Horse, give Wide Berth to the Plummeting Can of Red Paint, and Dodge the Okkasional Flaming Man. All can do much Harm, but are easily Avoided with the fakulty of Vision and Sound. Thus the Majikal Hat Must Not truly Isolate the Madman, but Rather allow the World As It Is to show through, and place the World As the Lunatick Wishes It To Be in front of the True World. Even the Lunatick's Attendants could never be so Cruel





as to truly Isolate the Madman from the true World entirely when he Wears his Hat.

And thus the World of the Hat, presented to the Madman for to Soothe him, shall instead Drive him to Terror, and Deep Horror, for the world shall be filled with Transient Beings and Transparent Objekts not deriv'd of the World. The Madman will see his Majikal Hat as a source of Fear, and thus be Dis-Serviced.

Thus, have I developed The Lunatick's Refuge. This is a Majikal Hat refined with a sekond layer, also in front of the Eyes, but behind the first layer and before the World. Upon the first layer shall be the Images that soothe the Madman. In the World exist all the Perils that drive him Mad. In between is a layer that shall create an Opaque Place where the nearer layer creates Imaginary Objekts. Thus, when there is no Fantastickal Image on the first layer in front of the Lunatick, he sees the World As It Is, in its Terrifying Glory. When the first layer holds an Image Artifishal, the sekond layer is Opaque as the darkest Ink, so that the near objekt does not Float in the Air, but rather appears Part of the World. For all its Benefits, the Majickal Hat, both in Original and Improved Forms, must Not be Worn by the Sane, for it shall Surely turn them Mad as well.

I see these layers of Images and Opaque Places as thin Fishbowls. The near layer, two Panes of Glass held closely together, filled with Water, holds many small fishes that do Hover and Dart as needed to create the Image as diktated by the Lunatick's Assistants. How these Fishes shall be Train'd is a matter of importance, which I hope to diskover by way of Eksperiment. I believe they will be Amenable to Vibration, and shall Investigate their control by Vibrating the Madman's Skull (by way of a Devyce attached to the Teeth). In the Opaque Layer, also Water between Panes, are Eels of the Blackest color, train'd Similarly, and Kept between the first layer and the Outer World. I shall seek a Patron to support the Development of the Skull Vibrator and the Lunatick's Refuge.

The Millenial Extender

The Candle Burns low upon my Desk. Tyme is visible in its every Flicker, each Dance of the Flame counts another Beat of my Heart. As must the Wick burn and shorten, so do the days of each Man. Due to my Principle of Wax Transmutation, we know that Wax Candles can neither be Created nor Destroy'd. The Illusion of burning Wax is simply the failure of our Senses to perceive its Transformation into the body of a Rhynoceros (in some Far-Off Place), whose Body is made of Wax. When the Rhynoceros dies, its Bones return to their basick Wax state, giving ryse to new Candles.

And as Candles Burn, so do the days count down. To keep Tyme is to lock up Eternity, and this is the province of only Heaven Itself. But to Mark Tyme, and Rekord its Passing, is Noble and Good, for it allows us to Plant at the Correct Moment, Harvest when the Fruit is Rype, and Stay Indoors to Avoid the Noxious Gases of the Dekomposing Rhynoceri as they Transmute back into Wax.

Though Tyme can only be seen as it Passes, still we can Mark the passing. For many Years have I used my Cirkular Candelabra to mark the Moments. With this Cirkular Candelabra am I able to determine the Tyme of the Day to within a Minute. This is of great value to me in my Celestial Observations and cooking of Egges in a Hard-Boil'd Manner.

From Wyse Predecessors we have Inherited a great many Useful Devyces. The Self-Lyting Wood is of Great Value during long Winter's nytes. The Nose Hair Trimmer is of great value in the Toillette, for though this Domestikated Animal can indeed cause Serious Damage when neglekted, with Love and Attention it is usually Quite Safe. And Liquid Stone is indeed a Blessing for those tymes when one Carves an Important Dokument in Granite and chisels the Wrongge Letter. Usually I find this the result of Insufficient Sleep, or Distraktion, most Often traceable to Troubles in the Snail Breeding Room.

Perhaps the Most Usefull of all such Devyces is the Crystal Chronograph. This wondrous Construktion allows us to track the Changes of the Days. The Crystal Chronograph in my Employ is Large as the Outside Wall of my Home, which Faces the Square. But I am Glad to use the Space as it Assures me of Fyner Hairkuts since my Hairdresser can no longer Claim that she was Not Aware of the Date for our Regularly Skeduled Appointments.

The Crystal Chronograph has a Great Many other Uses, but I fear for its Long-Term Value. Perhaps the Designers were not Thinking as Far as the Farthest Thinkers today Think. Consider the Strukture of the Crystal Chronograph. There are six Tubes with Slits in their Sydes, and the Keeper of the Mekanism is responsible for placing the Correkt Number of Crystals in each Tube. A glance at any Tube reveals how many Crystals are stacked insyde, from Zero to Nyne.

The two Leftmost Tubes, or Columns, indikate the Day of the Month. The middle Tubes rekord the Month of the Year. And the Rytemost Pair of Tubes indikate the Year. Thus would the Fourth Day of the Sixth Month of the Nynety-Eighth Year be Represented as 04/06/98.

Clearly the Designers did not expekt the Chronograph to last beyond the Final Day of December in the 99th Year of this Century. This is a Shocking and Unexpekted Flaw. I Suspekt that the Cause can only be Determin'd after Extensive Research on Tropikal Islands and propose to seek a Patron to Sponsor such Serious Work.

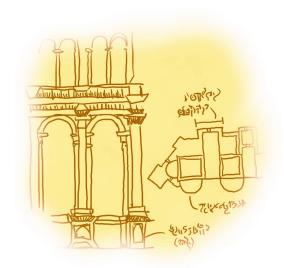
But the Problem Remains, that come the Last Day of the Century, we will Experience Terrible Problems, when those few who have been Train'd to track Dates will suddenly make Many Errors. The Risks are Huge: Old Men will bekomme Children, and okkupy Clothing that is Many Syzes Too Large. Milk will bekomme Very, Very, Very, Very, Very Sour Overnyte. Ships will Cross Myghtie Oceans in Numerous Round Trips in the tyme Normally Requir'd to Wash a Shirt.

These Calamities must be Avoided. But the Makers of the Crystal Chronograph are not Numerous Enough to effekt all the Necessary Repairs in Tyme. We seem Poised for Trouble. If Only we could Extend Tyme in some way, there myte be Tyme Enough to repair this and All Other Crystal Chronographs, or we could Invent something New that would not have these Problems.

Enter my *Millenial Extender*. Unlike my other Inventions, Creations, and Propositions, the Millenial Extender requires no Construktion. We merely need to Re-Interpret what we Already Have.

Consider that we now use the Leftmost Columns to represent the Numbers 01 to 31. This is Good and Sensible, since the Months have Days with these Values. But the Numbers 32 to 99 are Ignored, and this Wasted Potentshul can Weigh Heavily on the Sands of Tyme. Consider also the Months, represented by the center two Tubes, which are used to Denote 01 to 12. The Wastage is Worse, since we have ignored months 13 to 99.

The Solution I propose is Simple. The Fynal Year of the Century is Almost upon us. When it Arryves, we mark the first day as 01/01/99, as Diktated by Convention. The Final Day of the First Month is of course 01/31/99. The Next day would Traditionally be Counted as 02/01/99. To this I say No! Observe the Waste and



the Tyme that is so casually Disregarded in such Cavalier Dismissal of the Missing Days.

Rather, the Next Day is Instead Marked in My New Reckoning as 01/32/99. This continues, Counting the First Month as holding 100 Days. Then the Fynal Day of the First Month, 01/99/99 will Arryve, Nynety-Nyne Days after the first Day of the Month. Only Then do we move to the Next Month, 02/01/99. In This Way, we Create a Year of 9801 Days (since Month 00 and Day 00 are Diffikult to Teach to the Assistants who Maintain the Chronograph). This is Just Less than 27 more Years in which to Address the Problems diskussed Above.

With this Simple Change, we Easily Gain 27 Years in which to Repair our Chronographs and Invent New Chronographs that are not Limited to Two-Digit Years. When the Last Day arrives, it shall be Demarked 99/99/99, and Truly Tyme shall have been Fully Packed with Days.

Of course, I rekognize that this Problem is Stricktly a Result of Primitive Teknology and Embarrassing Lack of Foresyte by the Designers of the Crystal Chronograph. Surely no Future Civilyzation will make such a Mistake Again. Should they Do So, the Mass of Rhynoceros Flesh turning into Wax and Vyce Versa over the Course of a Few Short Hours will convince them Never to Make the Mistake Again.

Concluding remarks

I would like to thank Professor Stan Conversion for his assistance in deciphering the first three pages of the original manuscript, and his gracious permission in allowing me to present the excerpts above.

It is impossible to know where this archaeology project will take us. We have deciphered a few fragments on several other pages, and the ideas seem to interlock into some larger pattern. Stan and I have begun to develop some theories about what this bigger picture might be, but these pages and its contents are still pretty elusive. As our mysterious author might have said, it all seems Passing Strange.

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