

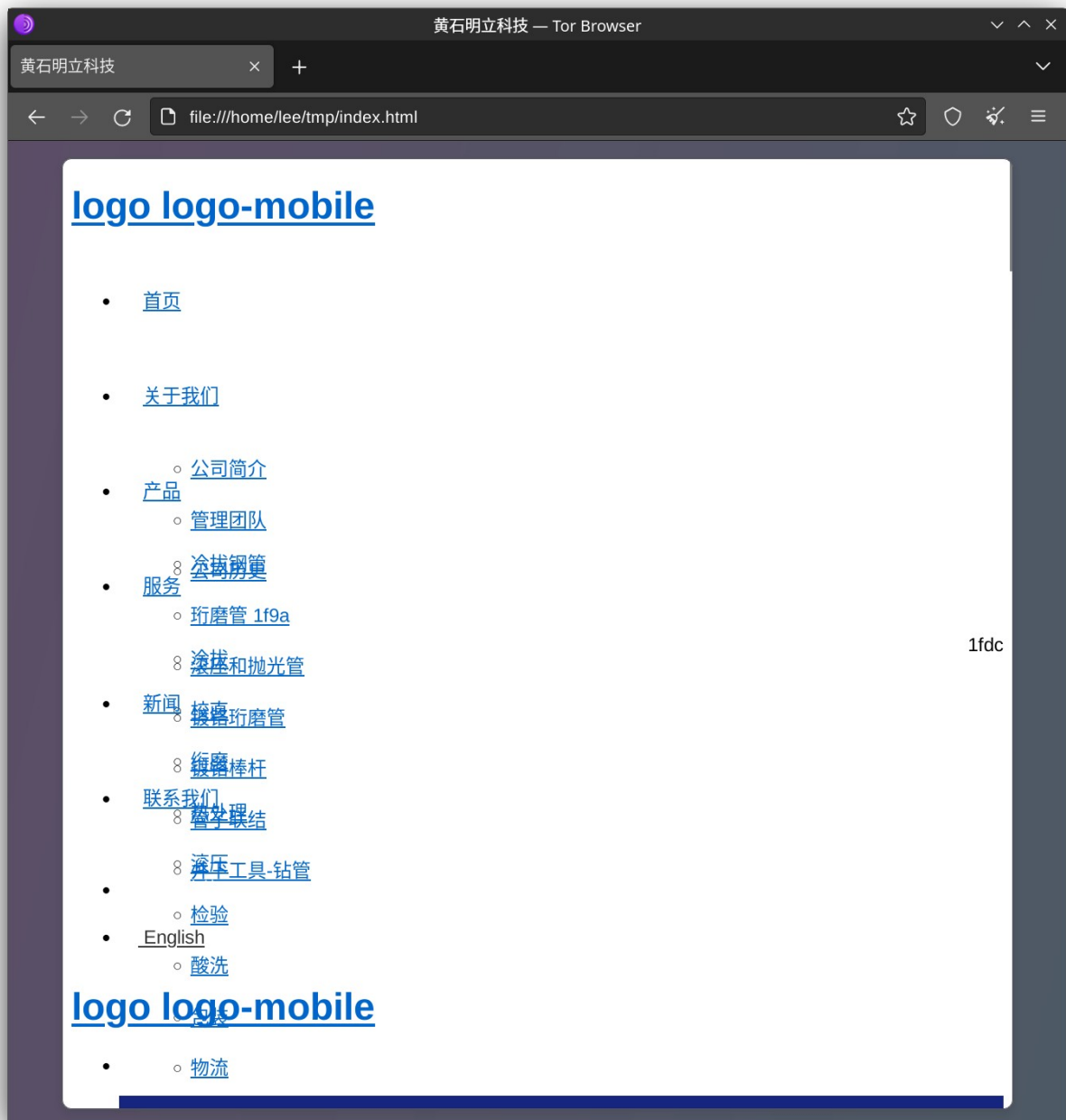
# Migration Memento from Lee Azzarello

I will be 70 years old in 2048. My parents will be long gone. I don't plan to have children. My siblings will be in their late 50s. Their children will be pushing 30.

I found this USB key at the Redwood City Caltrain station on the ground, not quite factory sealed but enclosed in a plastic press-and-seal bag. It's common knowledge not to insert random USB thumb drives into your own PC, if you care about privacy. This drive's plastic enclosure has writing in both English and Chinese. There is a black and white drawing of a sun (or moon) setting (or rising) over a watery horizon. There are the characters 明立, and other English text. GPT-4 and numerous websites behind the Microsoft Copilot search engine describe this word as a proper noun that isn't commonly used as a word in everyday Chinese. I assume it is the name of a corporation that wants to convey an image of brightly standing among their peers.

The URL <https://www.mingli-tech.com> has an invalid SSL certificate that is self-signed. It was issued at 03:03:15 GMT on Jul 15th 2024 and will expire at 03:03:15 GMT on Jul 15th 2034. This time capsule won't be opened for another 10 years, which will likely be well past the information this bogus security certificate attempts to protect. Sending an insecure request to the same URL downloads a file with the name index.html at very low bandwidth. 158K at about 300 bytes per second. The web server is configured (misconfigured?) to download the file rather than render it in a browser window. The file contains HTML text but it is invalid. It looks like the server is malfunctioning, or there is an attempt at a malicious payload, because the bottom of the file has a bunch of web server log lines with various request/response URLs from all over the world. After cleaning it up, the webpage looks like this





It displays the following English text further down the page

*We, As a leading processor of seamless tubes and proud subcontractor of DAYE SPECIAL STEEL, along with being a trusted strategic partner of CITIC PACIFIC SPECIAL STEEL, MINGLI has evolved into a renowned global manufacturer capable of producing all types of seamless tubes, irrespective of size, quantity, or destination. Our expertise enables us to tailor-make tubes according to your specific requirements, ensuring optimal customization for your needs.*

The other side of the thumb drive has two stylized Chinese characters surrounding what looks like a bridge or some other big structure. The same Microsoft Copilot translation system says the characters 恒通 (hengtong) are likely another corporation name that wants to express the message of their smooth consistency.

The URL printed beneath is [www.htsyjx.com](http://www.htsyjx.com) and is currently offline. The wayback machine says that Hengtong Petroleum Machinery corporation's website was last online September 25<sup>th</sup> 2023. It looks like this



That is the only information on the outside of the thumb drive. I'm curious about the contents. Perhaps they contain some secrets to an oil pipeline? Or maybe they have some ordering information from someone in the bay area looking for metal working machines. This device must have traveled pretty far to make it into my hands as I exited the 504 Caltrain to Redwood City on my way to work as an employee for the IYO corporation.

I insert it into my PC and mount the contents. The drive is a 4 GB USB thumb drive. This is small by 2024 standards. The volume is named CE1B-B4CC. There are two folders on the unknown filesystem, 'System Volume Information' and 'U Disk Content'. What is a U Disk? It has a USB device:vendor ID of abcd:1234. This is a peculiar combination of sequential characters. A

search for this device type reveals it is a fallback for thumb drives that have firmware that don't match any known device type. The authors probably used this code as a hail-mary pass to try and

mount the disk so we can view the contents. Listing the files in 'U Disk Content' shows file names that sound like a corporate presentation for hydraulic and pneumatic cold-drawn tubes. There's a video clip of a workshop during this corporate presentation named 'Workshop Video Clip.mp4'. The contents are very dramatic!

This Momento might seem impersonal but I traveled about 70 miles to pick it up and bring it home. It's possible whomever lost it that morning at the Redwood City Caltrain station traveled a greater distance to bring it to a corporate presentation. What if it was their only copy? When they arrived and were asked to present, they might have put their hands in their pockets and felt flush with embarrassment because it was lost.

I'm not interested in practicing or delivering a corporate presentation to an imaginary audience about the values of cold-drawn tubes but I could. And future people could as well, given a few assumptions about what technology will exist in 2048. We surely will have devices that can read thumb drives with USB-A connectors. Today we have USB-A to USB-C adapters. Will they continue to work in 24 years? Will this U Disk device type, which is a fallback driver in the Linux kernel as of version 2.6 continue to be supported? Today my kernel on the PC where I'm typing these words is version 6.8.0. What will it be in 24 years?

The video file (which you should totally watch) is encoded with the h264 and aac codecs. Will there be playback equipment to decode the audio and video when this drive is removed from the capsule? Where will the smiling workers portrayed in the metal tube factory be in 24 years? I like these questions, though they are somewhat unsettling. The answer could be they are dead and gone.

Perhaps we archive and preserve media for future people to understand past people. Not the Big Things told through historical narrative but the small things, the mundane and banal which sometimes feel so much like Big Things when we are creating them. Don't worry, the USB drive didn't give my computer a virus or commit automatic identity theft. Go ahead and put it in a PC (if we still have those) and get a window into the past showing the results of a corporate sales agent who traveled a great distance to persuade a company in Redwood City, California to buy their metal tubes.