The Thrilling Adventures of Lovelace & Babbage

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Sydney Padua
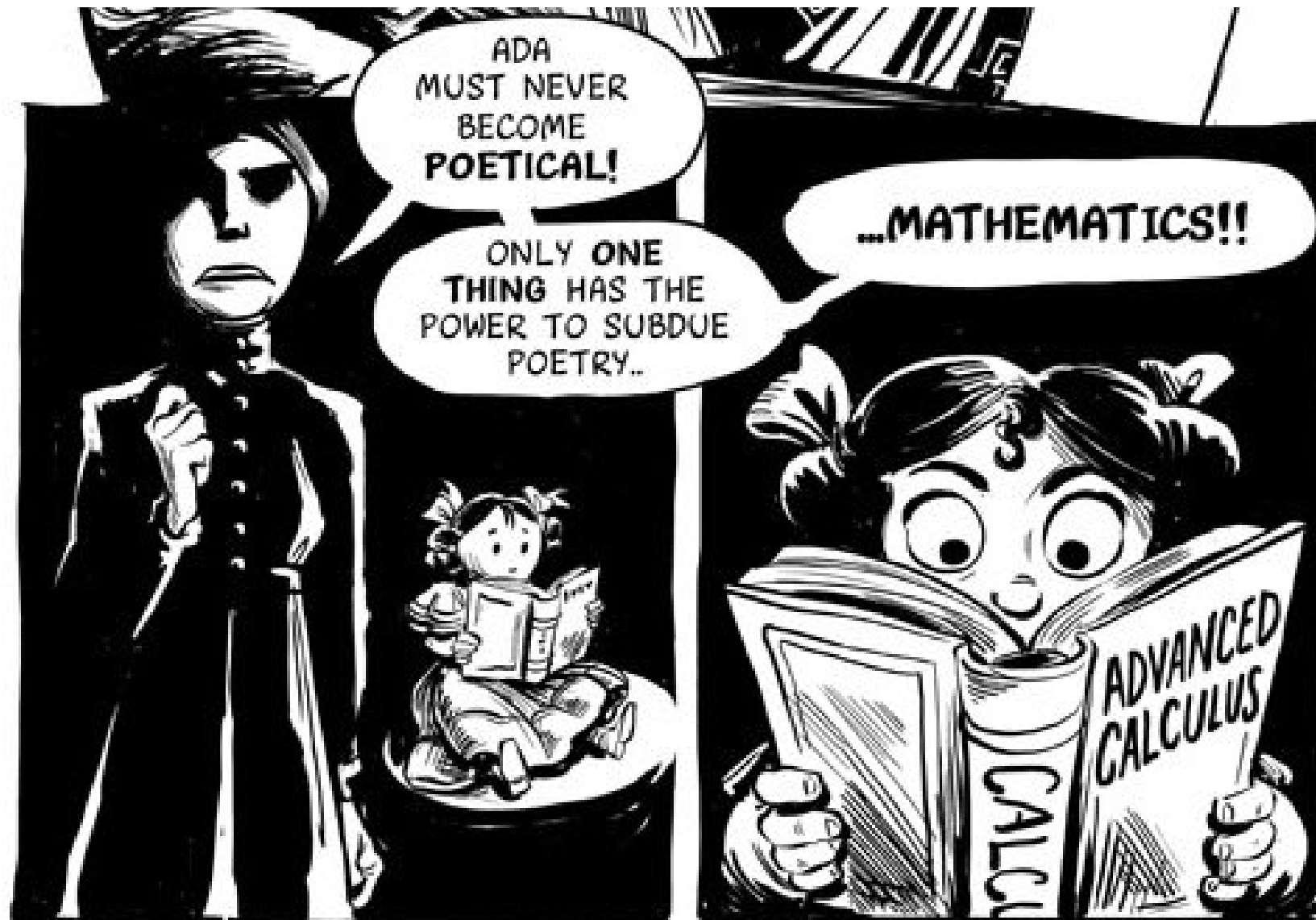
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MHV Linux Users Group
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Ada Augusta Byron

Charles Babbage

They Meet Cute at a Party

Translator & Analyst

In 1842, Ada Lovelace wrote the first paper on computer science, and published the first computer program, for Babbage's unbuilt design for a punchcard-run mechanical computer, the **Analytical Engine.**

Much Sad. Many Feels.

Unfortunately Ada Lovelace died of cancer a few years later, at 36.

Babbage never did build any of his calculating machines.

The first real computers weren't built until 100 years later.

However ...

In an Adjacent Pocket Universe ...

The Client

The Engineer

Footnotes!

✿ The "fiscal multiplier" is a measure of the effect of government spending or tax cuts on economic output; a "multiplier of 1" would be a model in which $1 of government spending increases the nation's GDP equally by $1. Economists amuse themselves by attempting to attach a "fiscal multiplier" number to each specific government action or tax cut. As one might imagine, no two people have ever agreed on what the fiscal multiplier actually is for anything, as it is extremely difficult to isolate the effect of a single action on the chaos of a modern economy. The value of this number is what is at issue any time you hear a debate on stimulus or tax cuts.

In 2012 there was consternation at the International Monetary Fund when they reran the numbers on the economic model that imposed austerity on many European nations3 and found that rather than a multiplier of 0.5 on austerity ($1 of spending cuts results in a 50¢ loss of GDP), it was maybe more like 1.7 ($1 of cuts ends up with $1.70 loss). Or maybe it's something else, who knows.

❦ENDNOTES❦

1. As Coleridge himself described it in his preface to "Kubla Khan" (I don't know why he's talking about himself in third person):

> On awakening he appeared to himself to have a distinct recollection of the whole, and taking his pen, ink, and paper, instantly and eagerly wrote down the lines that are here preserved. At this moment he was unfortunately called out by a person on business from Porlock, and detained by him above an hour, and on his return to his room, found, to his no small surprise and mortification, that though he still retained some vague and dim recollection of the general purport of the vision, yet, with the exception of some eight or ten scattered lines and images, all the rest had passed away like the images on the surface of a stream into which a stone has been cast, but, alas! without the after restoration of the latter!—

2. One of the Lovelace estates, anyways. Lord Lovelace had three, and a large London mansion. Babbage described Ashley Combe as "a romantic spot on the rocky coast about 2 miles from the post town Porlock" in a letter to Michael Faraday (this charming letter is in Appendix I). The house itself has crumbled into ruin, but you can see some of the bits and pieces on an exceptionally lovely stretch of what is now the Southwest Coast Path. In particular, you can glimpse the odd tunnels Lord Lovelace built on the approach, reputedly so his view would not be sullied by tradesmen coming on the road.
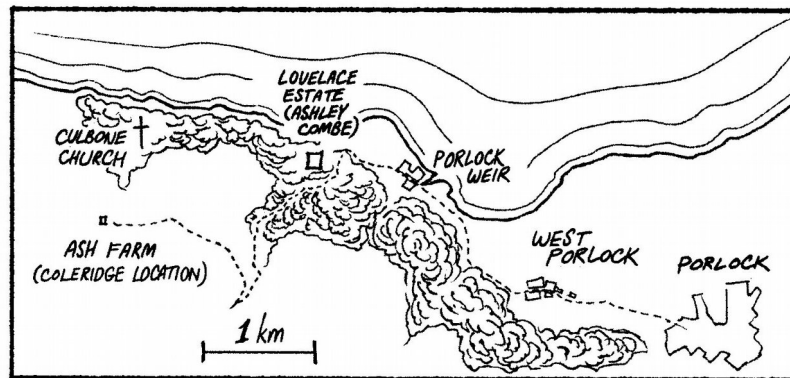

The distance between the "Kubla Khan" event and Lovelace's presence in Porlock is 3 km x 43 years or 1.8225 x 10^15 meters in Minkowski* space-time.

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*Herman Minkowski (1864–1909) converted Einstein's theory of relativity into a geometric expression of one-dimensional space. "Henceforth space itself, and time itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality."

Appendices

MEMORY: THE STORE

Some method for storing data is the first requirement of a computer. Babbage called his the Store. The Store, like the bulk of the Engine, is made up of tall columns of stacked wheels. Each column holds one number of up to fifty digits. The last wheel at the top indicates whether the number is positive or negative.
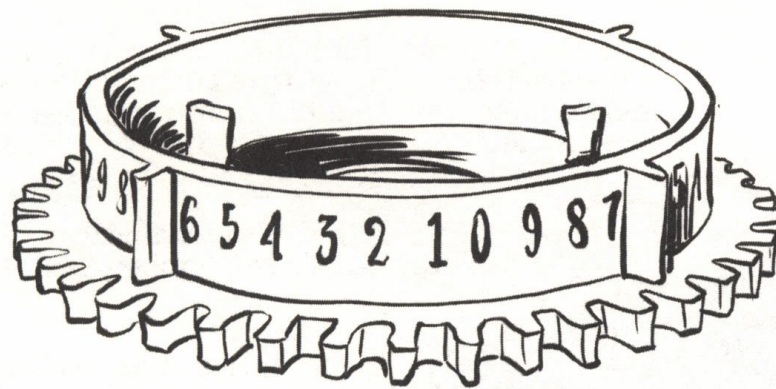
Babbage number wheel, actual size.

4

704
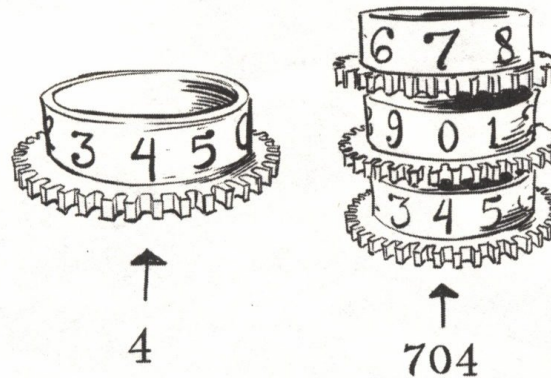
Epilogue

References

- sydneypadua.com/
- sydneypadua.com/2dgoggles/
- Amazon (and others, of course):

  The Thrilling Adventures of Lovelace and Babbage

  Get the paper version for better reading
- Sketch of the Analytical Engine
  - L. F. Menabrea (in Italian)
  - Tr w/ notes by Ada Augusta, Countess of Lovelace

Ed Nisley

Say "NISS-lee", although we're on the half-essed branch of the tree

Engineer (ex PE), Hardware Hacker, Programmer, Author

The Embedded PC's ISA Bus: Firmware, Gadgets, Practical Tricks

Circuit Cellar www.circuitcellar.com
   Firmware Furnace (1988-1996) - Nasty, grubby hardware bashing
   Above the Ground Plane (2001 ...) - Analog and RF stuff

Digital Machinist www.homeshopmachinist.net
   Along the G-Code Way (2008 ...) - G-Code, math, 3D printing
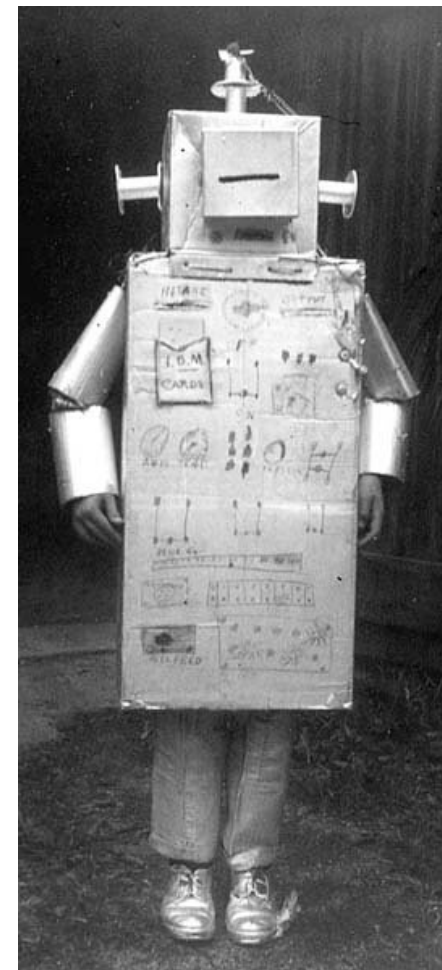
Dr. Dobb's Journal www.ddj.com
   Embedded Space (2001-2006) - All things embedded
   Nisley's Notebook (2006-2007) - Hardware & software collisions

My Blog: The Smell of Molten Projects in the Morning
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September 1962

If you
can't read this
then
make a new friend
'way up front