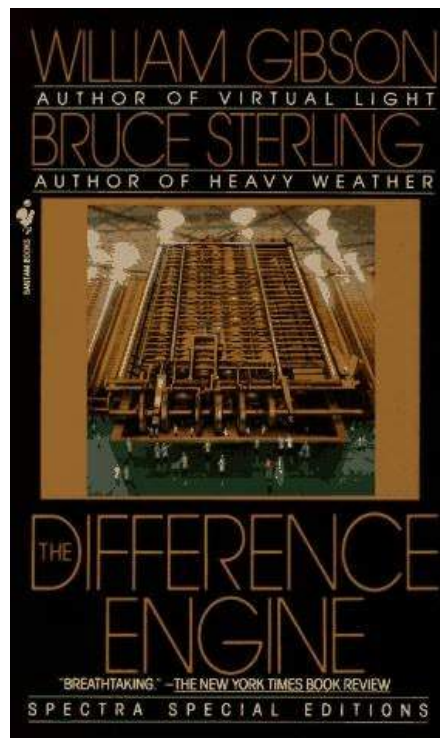




The Difference Engine

William Gibson , Bruce Sterling

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The Difference Engine William Gibson , Bruce Sterling

1855: The Industrial Revolution is in full and inexorable swing, powered by steam-driven cybernetic Engines. Charles Babbage perfects his Analytical Engine and the computer age arrives a century ahead of its time. And three extraordinary characters race toward a rendezvous with history - and the future: *Sybil Gerard* - dishonored woman and daughter of a Luddite agitator; *Edward "Leviathan" Mallory* - explorer and paleontologist; *Laurence Oliphant* - diplomat and spy. Their adventure begins with the discovery of a box of punched Engine cards of unknown origin and purpose. Cards someone wants badly enough to kill for...

Part detective story, part historical thriller, *The Difference Engine* is the first collaborative novel by two of the most brilliant and controversial science fiction authors of our time. Provocative, compelling, intensely imagined, it is a startling extension of Gibson's and Sterling's unique visions - in a new and totally unexpected direction!

The Difference Engine Details

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ISBN : 9780553294613

Author : William Gibson , Bruce Sterling

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Genre : Science Fiction, Steampunk, Fiction, Alternate History, Cyberpunk, Fantasy

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From Reader Review The Difference Engine for online ebook

Brooke says

When I read Neuromancer, I started out not understanding a thing that was going on, but finally made sense of everything by the end. When reading The Difference Engine, I had the opposite experience. The first segment was fully comprehensible, but afterward the book just turned to mush. What in the world happened? Who were all these characters? What was the conflict and what was at stake? Don't ask me, because I haven't a clue. I got more and more irritated as I got closer to the end and had to suffer through an increasing number of pompous blowhards' points of view. William Gibson is always a more difficult read for me, but this is the first time I felt let down.

Mina Villalobos says

This book is pure brilliance. As all the other Gibson books I have read, the ending kind of.. dissolves into mist, leaving you with questions and giving you a lot of room to imagine and pursue ideas -this being a very positive thing, actually. I think Sterling's style gave Gibson a grounding tug, so the whole ending chapter is about closure, something Gibson doesn't always work well with, but this one made me go back and forth to refresh character, and I had wikipedia open to read the biographies of the historical characters I didn't know. This historical knowledge wasn't necessary to understand the story -I did most of the reading in ignorance, and it didn't deter from the storytelling- but knowing it gave a lot of details more depth, or made them ironic, or.. I don't know. Richer, is the word I'm looking for, I guess.

The story itself, a detective story of sorts, is full of strange details -since the era of technology came to happen 100 years before it's time, you get progress along with all the social changes that 1800s faced -the abolition of slavery, the rise of communist ideology, Japan meeting the western world- and the askew vision of the world, with all the differences big and small, make it all strange but still familiar. The interweaving stories don't weave as well as Gibson usually makes them weave, but it's also a lot more linear than his other books. I'm going to look for Bruce Sterling's work, I'm curious to see how he writes and how they influences each other.

In the end, Lady Ada's lecture about open systems made me soar with joy and... possibilities. I dreamed about the book the whole night after I finished it, I talked about it with everyone willing to put up with me talking about artificial intelligences and the nature of consciousness, and I had all around a fantastic time reading this.

mark monday says

STEAMPUNK SALAD

3 (5-ounce) cans solid Victorian Era packed in water
1/2 cup minced Bruce Sterling
1/2 cup minced William Gibson
1/4 cup Technological Speculation
1 hard-boiled Spy Thriller, chopped in large pieces
1 soft-boiled Detective Tale, finely minced

3 Major Characters, lukewarm
1 Mysterious Box of Computer Punch Cards
Salt and Pepper
1/2 teaspoon Ambition

STEP 1

Place Victorian Era in fine-mesh strainer and press dry with paper towels. Transfer to medium bowl and mash with fork until finely flaked. Microwave Bruce Sterling and William Gibson with Ambition until both authors begin to soften, about 2 minutes. Cool slightly, about 5 minutes. Fold in authors, Technological Speculation, Spy Thriller, and Detective Tale into Victorian Era and mix until bland and without individualistic flavor.

STEP 2

Stir 3 Major Characters and 1 Mysterious Box of Computer Punch Cards into mixture. VERY IMPORTANT: mix thoroughly! Mixture must remain insipid and uninspiring. Add discreet amounts of Salt and Pepper. Salad can be refrigerated in airtight container for several decades.

Alicja says

rating: 5.5/5

One of my all-time favorites. Originally published in 1990, it predates many of the current steampunk novels and manages to think outside the box of clichés that many modern novels have fallen into.

This novel examines an alternate history in which Charles Babbage builds a ‘difference engine,’ a forerunner of modern computers that runs on steam (it is composed of gears and utilizes punch cards). World history diverges; engines become common changing Victorian England significantly as the empire retains world power. This technological advance gives England an edge during the industrial revolution, in military campaigns, and in greater citizen control through data (the government Eye watches). At the same time, the Civil War fractured United States into multiple territories diluting its power. This alternate reality uses key historical figures, which may or may not lead very different lives than they had in our reality. And of course with power comes politics, as our characters and alternate historical figures get caught up in intrigue the plot, as they say, thickens.

An essay by Catherynne M. Valente entitled “Blowing Off Steam” invites Steampunks to focus on the steam and punk (and not just get lost in some romanticized version of the Victorian era); to relish in the grittiness, nastiness, death, and terror that accompanied steam technology and the industrial revolution reaching deep for the rebellion inherent in the punk. This novel is the very definition of Steampunk, encompassing both of the concepts beautifully in a terrifying way.

Gibson and Sterling (awesomeness) came together to compose a wonderfully intelligent read (I had to research many historical figures and events to make sense of the story and am still a bit muddled). I have read the mixed reviews, understand the complaints that many had, but to me what many saw as drawbacks were actually what I absolutely loved about it.

The story develops slowly, the plot is more of a patchwork of events that needs to be taken out of time for us, readers, to analyze and reassemble ourselves (a sort of DIY very much in the spirit of Steampunk). The whole novel has a realistic feel, if Babbage had developed his difference engine then maybe that could have been our timeline, our reality. That realism leads to stray ends and plot tangents that remain unanswered.

Realism is also enhanced through the highly detailed and gorgeously poetic descriptions that will transport you into this strange yet familiar world (which sometimes feels disconcerting, as if you're trying to grasp something familiar but it's different enough to elude you). The realism of the industrial revolution was presented as raw, gritty, and dirty; the technology portrayed as necessary and useful but having cruel negative effects including human misuse (such as London's "the Stink" or the constant government Eye watching).

The story is told through three individuals. The first part is shown through the eyes of Sybil Gerard (ruined daughter of a deceased Luddite leader), the second through Edward "Leviathan" Mallory (adventurer and paleontologist), and the third through Laurence Oliphant (journalist in daylight, government spy behind closed doors). They may barely know each other or of each other but through them we get a glimpse a larger picture. They aren't wholly aware of how events they are a part of fit together, or even that they have greater meaning past their current circumstances.

I must admit that Dr. Mallory is my favorite (his story gets a significantly larger amount of coverage in the novel); an adventurer scientist braving the wilds and natives of Wyoming finds the bones of a leviathan, a dinosaur. Back home in England, he gets unknowingly mixed up in a political plot that leaves his life in danger (not that he shies away from a fight, I'll go as far as to say he actually enjoys them in a morbid sort of way). This is my favorite Steampunk archetype (an Indiana Jones type) but Mallory is more than just that, he's also quirky, flawed, and a product of his environment.

The ending is unsatisfactory; it is vague and, well, brilliant in that it leaves us with room to imagine and pursue our own ideas (while at least tying up some loose ends). I am sure I missed much during my first reading and will have to add this one to the re-read pile. I love books that I can pick up over and over again to find something new; a deeper understanding, inspiration, or ideas. In the end, to me, this is a test that distinguishes phenomenal/epic/brilliant books from the great ones. And this novel is phenomenal, epic, and brilliant!

Greg says

Yuck yuck yuck. Bad action, bad dialogue, bad characters. The worst of all, though: the world was wonderfully designed, but the plot was so meaningless and boring. What a waste of a grand environment to set such a terrible story.

Some collaborations combine the strengths of all involved into something extraordinary. Others magnify the weaknesses. This is a fine example of the latter.

PS: the ending is the greatest WTF in modern history.

? Irena ? says

I have absolutely no idea how to rate this book. Parts of it are fast-paced and great. And parts are really slow and some are plain boring. Since I am not quite sure and I want to be fair, I'll leave it somewhere in the middle. I did kind of like it, after all.

The book is divided into five parts (iterations) and it takes place in a very dark XIX century London. Everything that happens to the characters in this story somehow ends up connected to a wooden box full of punched Engine cards, but not the ones which are usually used (Every citizen has a number and a file on

him/her).

None of the characters are memorable. Each have a part of the book which tells his or her story. Sybil Gerard is in the first 'chapter', Edward Mallory got the two next which also introduced Laurence Oliphant, who got the last one.

The description of the book says this is a part detective story, part historical thriller. It is, but it is so much more, which is precisely the thing which drowned the story.

Liz says

Alright, so it was a bit of a jolt to my system, as I haven't read anything set before 1900 in quite some time (I KNOW! HORRIBLE!), which is a shame. Once I got over the culture (which was rather disparaging to a variety of people who were not white men) as you have to do with things set in history, I rather enjoyed most of this book. The book is divided between three different main character perspectives, the largest section being given to Dr. Edward Mallory, who is a paleontologist or as they put it savant and adventurer sort. The beginning follows Sybil, who, once you get past the tiresome "fallen woman" motif is actually rather clever and I felt bad that her part was cut so short and had a certain focus. The last is Laurence Oliphant, who became my personal favorite despite having the shortest section. He also happens to be a Real Person, more or less (as much as any of the historical figures are).

There is... there is a lot in this book and if you don't have any sort of background in Industrialization or technology and mathematical histories, you might get a bit lost. I spent the past semester studying a lot of these topics and even I found myself having to look up things a couple times. This doesn't mess with the pacing of the story, oddly, I am just a completist that hates feeling like I'm missing something. It wasn't bogged down in technobabble either, and what was described seems workable and logical enough to be seen. The politics are insane, but that's what makes it Alternate History, really, for the technologies are merely a result of the social crazyness. I was particularly fond of the touch with Manhattan being some Socialist island, with Marx chillin' out there. No, really. I'm not kidding. There were Communists, which is Always Welcome.

Really, if you hate history, you'll dislike this book. Especially considering where the plot ends up. Though, I say you should learn to like history, lest you try to invade Russia in the winter. But I digress.

My only criticism of the book is the ending was too... I had to look it up on wikipedia to figure out just what the hell happened. Once I was aware what happened, I liked it, but it was a bit vague and abrupt for my liking. And if you can't stomach your history (alternate or no) un-whitewashed, then you'll not like that. I personally rather like that, as it reminds me that people are fallible and that progress while nifty and cool also tends to screw over certain people. But despite these negatives, the book had a strangely... optimistic feel? Especially when looking through Dr. Mallory's viewpoint (I also liked him quite a bit for strange reasons). It's kind of humbling for me, as someone that sometimes cannot see the computer for the circuits, so to speak.

Main reasons you should read this:

- Alternate history is fun and you may learn something! No really!
- Steampunk is wicked cool and far less dreary than Cyberpunk on the whole (though I still love Cyberpunk)
- The plot and characters are interesting, which is sometimes hard to find in "techie" fiction

I think I may have to read more of Gibson's work, as that was quite satisfying, if confusing.

Joe says

To find the story of The Difference Engine, first dig through a layer of Victorian-Era British slang, followed by a layer of alternate-history jargon. Next, carefully remove a rocky patch of shifting perspectives and unclear motivations. After that, you'll be faced with a bloated stratum of physical description so detailed and uninteresting you'll be tempted to speed through it, barely glancing at the muddy mixture while you shovel it out. I suggest you give in to this temptation.

And what's your reward for all this work? Well... there's some bland technology (basic transportation and printing) that didn't exist in our version of the 19th century. And we get to follow around esteemed paleontologist Edward Mallory as he tours London and blunders into a series of silly, Hollywood-style action sequences that clash with the otherwise snail-pacing. It's too bad the story isn't about ole' Ed digging up dinosaurs as he proves quite engaging on the subject for the few paragraphs where he gets to opine on his field of expertise.

Co-authors Gibson and Sterling claim they spent 7 years writing this novel. Perhaps they should've spent more time editing each other than piling on literary dirt. Or maybe this is simply evidence that sometimes two cooks is too many. It hardly matters, we're talking about a 'Difference' without distinction.

Jenny (Reading Envy) says

I gave this the old college try, getting to page 155 before giving myself permission to stop. I feel bad because I was supposed to read it for a book club but there are a few reasons it just wasn't for me.

-Info-dumping. I know many steampunk novels suffer this issue, even in such an early work as this, because people who are really into that kind of novel tend to love the geeky intricate details that build this alternative world. I'm just not one of them. It reminded me of Neal Stephenson in Quicksilver, so if you like the treatment of detail in that book, you might like it.

-Details. Yeah, said it already but it bears repeating. There are parts of this book that will make some people completely giddy - the historical figures, the programming cards, the fitting in of technology into a world it didn't happen in, etc.

-Sex. No, just kidding. I don't mind sex. But there was something awkward about the partnering in this book. It was almost... announced. "And here is where we will have sex!" Maybe the "lady of the night" character wasn't believable as who she was supposed to be. But alternate histories can mess with your head that way.

Ian says

I give this two stars because I quite enjoyed the first 50 pages or so. Then it was crap from there on out. (Well, I assume the rest was crap, as I only read another 50 pages of pointless drivel before deciding not to waste any more of my precious time.) It was odd. The first 50 pages formed a reasonably complete, self-contained, and satisfying short story. I don't think those pages were intended to be that way, but they were.

Then another chapter started with totally different characters that had nothing obvious to do with the first portion. Now, that sort of structure by itself is not so uncommon and I enjoy many a book that sport that very look. It seems likely that the two stories were intended to intersect someplace down the line. But the first portion--the satisfying complete story--appeared to be *over*. That is, it reached a plausible and satisfying conclusion. So I couldn't see it intersecting with anything later on. And the other odd thing about this book is that the first portion was well written, while after that it just sucked balls--and not even big hairy ones, just boring and pointless ones. I believe the book has two co-authors and I wonder if one of them is decent and the other one, well, he just sucks balls. But I don't know which is which.

Wanda says

As many others have pointed out, this book is one of the first in what we now know as the Steampunk genre. It explores the question of what would happen if the Industrial Revolution and the development of the computer had coincided—what would Victorian society have looked like?

It's a complex novel, with a lot of layers. I read most of it in airports and on planes and didn't have the best circumstances to be able to concentrate on those details. On the other hand, if it had been really riveting, I wouldn't have noticed my surroundings, so I apparently didn't find it all that compelling.

I appreciated the re-structuring of British society, from being run by the blue-blooded to being administered by the scientific. It was nice to see paleontologists and poets being recognized for their skills and not just dismissed as soft science or whimsy. And there must always be a resistance movement, which was well realized and sported realistic details, in my opinion.

The story frequently got bogged down in the details, however, and then just eventually petered out, leaving me disappointed. After a strong start, the weakness of the ending was a let down.

Book number 269 in my Science Fiction and Fantasy Reading project.

Eli says

A dense, dark book. Full of amazing ideas and richly realized settings and gadgets; whetted my appetite for steampunk. I know I missed a lot and might be willing to reread it at some point to pick up more.

But the plot is full of holes and jumps and places where the authors seem to have lost interest and wandered off into something else. Why spend the first 100 pages establishing Sybil as a major character and then send her away for the next 300? Why place so much emphasis on the French cards and then have them be not much of an issue? If Captain Swing and his anarchists (or were they communists? Not so well shown) were going to be such a big deal, why make them seem, in the lead-up to their "big scene" (and the scene itself) more like a pesky mosquito than a threat to national security? I didn't imagine they were supposed to be ominous until the book told me they were.

This may be partly because of my other gripe: uneven development of minor characters. The main ones were done well, but Lady Ada, who was only a passing fancy, was strongly drawn, where Captain Swing, who was supposed to be a menace, was a cartoonish caricature. And the ending! Whoa, the anticlimax that was the ending. We never even met Egremont, but we're supposed to care what he does? The Grand Napoleon is

destroyed, and we learn it just in passing?

This isn't a bad book; it's just one that puts more emphasis on mood and setting and gadgetry than on plot and characterization. This a rare case where that feels like a conscious choice, not a fatal flaw.

Rebecca says

Ok, so as far as I can tell, this book pretty much invented a lot of the steampunk trappings we take for granted. And the world-building is seriously awesome. There's some fascinating alt-history, lots of SCIENCE!, and miles and miles of clockwork computers running everything. The great horse races are replaced by mechanical guernseys, Japan makes wind up dolls out of whalebone, there's even a weird kind of digital animation. The whole thing is put together exceedingly cleverly. First rate world-building at its very best.

But then, aaaarrrrrrgh. (Yes, this is a very technical reviewer's term.) I think I'm actually going to have to list the things that PISSED ME OFF, quite a bit, really.

Spoilers sown in liberally, but given that the authors themselves are the worst destroyers of tension, it won't ruin the book too much for you. Here there be rantings.

1. Characterization. Ok, this is really more just personal preference than legitimate gripe. The tone and characterization had a cold feel that I hesitate to dub "masculine", especially after the beauty of the first two male-authored books I read this year. But it feels like a "guy" book. The style reminds me of classic 1950s science fiction, or modern day action spy novels. No one really elicits your sympathy. Characters do not converse so much as pontificate. The main character has manly weaknesses, such as being too rash, that do him no real harm in the long run. Very Marty Stu. It's all about the world and the plot and not really about the people at all. Well, that's not ideal, but not really a hanging offense--plenty of people seem to prefer this style, it's just not my cup of tea.

2. Sexism. Here's where my blood first started to boil.

Ok, so the deeply problematic structure, which I'll address in a moment, strongly favors the paleontology Mallory. Most of the book is from his perspective. Mallory is a fairly typical Victorian technocrat, with some opinions about women and non-Europeans that are fairly typical for his time. For example, he has a conversation about the backwardness of the Japanese where it is clear that the authors think he has his head stuck up his ass and will ultimately be proven wrong. Fine. It's historically accurate. He has a similar conversation about women and how no matter how smart they are, they really are useless without a man.

Thing is, from the way women are portrayed in this book, the authors believe that one.

There are only a handful of women who appear at all. Surprisingly, it actually passes the Bechdel test--near the beginning, two whores have an extended conversation about politics, paleontology, and singing, along with the discussion of their clients. But well, they're basically all whores.

And I don't really mean women who have taken control of their sexuality and enjoy sex. No, I mean women who sleep with a lot of men, without seeming to enjoy it at all, mostly for gain, and are looked down upon by the authors for doing it.

We have one of the ostensible main characters, a whore named Sybil who inadvertantly starts off the plot by

following the instructions of her new client and then promptly disappears, reappearing to have turned out to have been helped by another man by being married to a third man who died before she met him. She calls herself an adventuress, but despite a brief period where it looks like she might get some autonomy, is ultimately helpless without a man and kind of pathetic even so. And a whore.

Then there are some minor female characters. Sybil's roommate Hattie, who's also a whore, and has some of the least erotic sex with Mallory I've ever read. Basically, the very extended scene seems to exist to remind us that men have urges they need to assuage, even if women are kind of disgusting. There's also a whore Mallory had sex with in Canada he thinks might have been diseased, and a Native American woman he slept with on a dig who he remembers with contempt as having slept with all the other men, too. There's an actress, who might as well be a whore. And there's Mallory's sister, who's totally a virgin. This is important because when someone tries to ruin Mallory's life, they send her fiance a letter saying she's a slut. At least she's not a whore, though.

And then there's Lady Ada. Whom the world worships as the Queen of Engines, and whom Mallory desperately tries to help. She's brilliant and beautiful and her father Lord Byron is Prime Minister, and she spends all her time with the royal family. And the plot hinges on a box of punch cards that came into her possession. Oh, look, it's a smart and useful female character who might be awesome, since everyone says she's awesome, right?

Well, no. Because it turns out she's a drug-addled, gambling addicted, hopelessly foolish slut who is coasting on a brief flowering of mathematical ability in her twenties that she's never repeated. And she totally sleeps around. That whore. It's embarrassing, really.

3. Structure. So remember how much trouble I had pinpointing who the main character is? Well, the structure of this book is ridiculous. I think the idea was that it was three linked novellas and an appendix a la Tolkein. Only, while each novella comes to a conclusion, none of the conclusions are particularly satisfying.

The first section features Sybil the whore, and lasts 71 pages. The most important thing she herself does is send a telegram. It ends with a murder for mysterious reasons.

Next section is Mallory the paleontologist, for 249 pages, none of them involving Sybil whatsoever. It vaguely mentions the incident that caps off her section, but not as anything important. He acquires Lady Ada's punch cards and hides them. Then has about a hundred pages of adventures with people trying to find the cards, which end without them finding the cards or him ever finding out what was with the cards. He also briefly meets Oliphant the spy, who promptly disappears. Suddenly, it's twenty years later and he dies of a stroke. Whoops!

The third section is Oliphant, and lasts for 72 pages. Sybil and Mallory are each mentioned in passing, but aren't particularly important. The murder is solved in a completely anticlimatic way that has no bearing on the plot. The cards are found and their purpose discovered, in a completely anticlimatic way that has no bearing on the plot. The telegram was apparently the thing that is important to resolving the new major problem that crops up. Only Oliphant gets syphilis in a paragraph near the end for no apparent reason and so disappears. The Very Important Message is delivered by a minor character who's barely appeared before, and the section ends before the addressee actually reads the message. So no resolution whatsoever.

The last section is a series of snippets--press clippings, songs, etc. It contains the pretty much unnecessary world-building and denouncement that the authors couldn't be bothered to work into the book. But they came up with it, so you have to read it now. It's 32 pages in which they answer none of the questions you want answered but fill out the details of things they gave you enough hints to work out on your own. Useless.

Also, at the beginning and ends of chapters, they switch into present tense for no good reason. The bulk of

each chapter is in past tense.

4. Endings, or lack thereof Each section? Progressively more pretentious and experimental. Sybil merely has her path diverge forever from the one interesting person she encountered. Mallory dies. Oliphant's section, on the other hand, suddenly devolves into blank verse for no apparent reason at all. You're in an adventure/political novel, and suddenly it's experimental fiction! Who knew? So really, it shouldn't surprise you that the same thing happens at the end of the errata. Bullshit callback to Mallory's death, a bad pun on some mystical nonsense they threw in that never made sense, and the final line of the novel is an exclamation point centered in the middle of the page, all by itself.

What.

5. Mystical nonsense they threw in that never made sense. So 99% of this book is alt-history. If Babbage had succeeded in building his difference engine, possibly all of these events could have happened. Physics and chemistry seem to work the way they should, mysticism is ridiculed, it's all backwards science fiction.

So why, on the last page of Mallory's section, does he suddenly discover Cthuloid beasties which are never mentioned again?

Also, Oliphant seems to be followed by an All-Seeing Eye that I can't figure out. It might be a metaphorical reference to the Illuminati or something. Or it could be a literal occult eye that he thinks is following him around. Not clear.

So basically, they wrote a cold but brilliant steampunk adventure novel with a problematic structure. But then, that seemed too much like selling out. After all, neatly tying up the plot threads you laid out in a satisfying way that justifies the amount of effort the characters went to following them is so hackneyed. Instead, throwing in mystical mumbo jumbo and replacing the actual climax with a few lines of incoherent, pretentious poetry is so much deeper.

And if you don't like it, well, it wasn't for you. You're just not deep enough to appreciate it. Go back to your Asimov and stop whining.

Whore.

J.G. Keely says

My Shakespeare professor was ravishing: clever and ebullient, and never to be found without knee-high leather heels. I drew playbill covers while she lectured, and gave them to her at the end of class. One day I went to her office hours and there they were, all arrayed upon the wall above her desk. Life is the better for beautiful, passionate people.

One day, at the end of class, she beckoned me over: "Are you going to turn your next paper in on time?"

Of course, I answered, non-chalant, with a crooked smile--why wouldn't I?

"Because you turned the last four in late."

Crestfallen, I merely nodded, the chastened acolyte, vowing that I would do better, next time.

It was my habit to sit in my little apartment, a few blocks off campus, late into the hours of the night, not writing papers. I watched old BBC series, worked on my own little projects, and visited this site, to read about Victorian London.

There I discovered Henry Mayhew, founder of the era's most successful and brilliant satirical publication, *Punch*, who spent his free time wandering the slums and carefully cataloging the lives of the poor. While considered an eccentric waste of time by his peers, his *London Labour and the London Poor* is a groundbreaking work of social research, and filled with the most fascinating and unbelievable details of life, some horrible to tell, others uproarious, and all the sort of thing which make any aspiring writer throw up his hands and cry out "imagination is a fool's crutch, which never could pretend to depict the world half so rich or unusual as it truly is!"

I delighted likewise to read of Isambard Kingdom Brunel--and not merely for his fantastic name--but because he contrived to build a shipping tunnel beneath the Thames in 1825--and succeeded. Then there are the innumerable pieces of erotic fiction that flourished in the upright, proper age, an amusing reminder that there is no new act or desire under the sun, as plentifully evidenced by curious work of one mysterious 'Walter', a man of the upper middle class who wrote an extensive, rather unflattering memoir of his own sexual escapades, *My Secret Life*, which is at turns amusing, disturbing, unbelievable, and often, altogether too human.

I can still remember the night when, up late with a paper to write, I stumbled across a growing subculture in California, 'Steampunk', whose devotees dress themselves in top hats, cutaway coats, and other such fine style, drinking Absinthe, and hearkening back to that sophisticated age. My interest was piqued.

I traced the movement back to this book and picked up a copy, used. Of course, I already knew Gibson and Sterling as the innovators of the Cyberpunk subgenre, so I was excited to start. A half-chapter in, I decided I should probably know more about the Victorian before I tried this book again, and so it sat on my shelf for long years. It isn't that the story cannot be enjoyed simply as an adventure, but without prior knowledge I worried I'd miss the subtext.

I looked more into Steampunk and found that its adherents didn't know much about Brunel, Mayhew, Walter, Ada Lovelace, or Disraeli--let alone more obscure figures. They knew Byron, Keats, Shelley, maybe Blake. They were mostly music scene kids with money who wanted to show off, though even their knowledge of the fashions tended to be sadly spotty and incoherent.

Perhaps the most telling thing about the movement (and the many books that have sprouted up since it became popular), is the fact that while the genre is called *Steampunk*, taking place in an era when economic inequality exceeded even the modern day, when anarchists, terrorists, nihilists, utopianists were bombing cafes to protest classist, top-down governance, when native peoples were rising up against the brutalities of industrialized colonialism, when the women of London were learning Jujitsu so they could fight off policemen while organizing to get the vote--yet all these cosplayers and writers focus on wealthy dilettantes, scientist inventors, the landed gentry, and nobility. They ignore all of the battles for equality and rights so they can instead play at a history of white, upper-class power (the same reinvention of glorious white history offered by most genre fantasy).

So it's curious that this book, one of the starting-places of the movement is so obsessed with precise knowledge and references to the period. It is not a reconstruction--it presents an alternate history, so all the characters we see are different than we would expect them. It's amusing to watch these familiar personalities

in unfamiliar, yet fitting roles.

Likewise we have a mix of periods clashing together, since the whole concept is that Babbage's Difference Engine, the first computer, was actually built when he designed it, and not a century later. It's always a curious question to ponder: what if Archimedes early explorations into Calculus had been widely known instead of lost for millenia? What if the Greeks had realized the steam dynamo could be more than a toy?

Playing with these ideas can provide a lot of fodder for writers, looking to the past in the same way Welles and Verne looked to the future. Many of the most amusing moments in *The Difference Engine* are throwaway references, such as Ada Lovelace asking if there might be some future in 'the notion of electrical power', hinting at the fact that electric power progressed from theory to practice quickly in the real world, while the computer languished, but it need not have been so.

But as I said, the central story is not overly concerned with in-depth knowledge: terms and references are thrown around constantly, but none are required in order to comprehend what's going on. The MacGuffin is a MacGuffin--more interesting if we understand why, but hardly necessary for the plot.

The structure of the story is unusual, and often, the book feels more like an intellectual exercise between the writers than a streamlined story. There is a commitment to verisimilitude, realism, and historicity throughout, so that things are never tied up neatly; there is no single, easy end, and we get three related stories which, as a whole, tell a larger story, but there is guesswork in the gaps between them.

We even get a short section of 'related documents'--newspaper stories, letters, speeches, and such things which many Victorian writers (prominently Stoker) used to spice up their works and play with the narrative voice. It's a useful structure for authors, since it allows them to dole out information in pieces without suggesting an absentmindedly omniscient narrator.

Yet it is certainly possible to carry verisimilitude too far in the name of realism. A story which painstakingly described every detail and moment, went off on digressions about every tertiary character or bit of fluff about the world, used realistically fragmented, stuttering dialogue, and killed off or abandoned characters at a moment's notice, all without a thought for how it would effect the structure or the story, would be very unpleasant and rather pointless reading.

So we must ask: where to draw the line? When does detail and allusion simply bog down the story? When do sudden character exits make the story incomplete? It's hard to find a rule of thumb, but we can say that any piece of information the audience likely already understands need not be made explicit, any detail which does not build mood, character, or plot can be safely left out, and a character should get *some* kind of complete personal arc before being unceremoniously dumped.

And in those regards, this book almost entirely succeeds. Each individual story doesn't quite stand on its own, and together, they do not elevate the book--there are too many spaces left unfilled--but they do coalesce into something more-or-less solid, something which we have experienced fully, and can walk away from having had our character arcs, and a very complete world.

The writing is also mature and carefully-considered. We can see the authors making numerous deliberate choices about what their world is, who their characters are, and who they aren't. There are, as expected, some sparking moments of hot, flash prose (probably Gibson's) which illuminate moments here and there, as well as the overwhelming press of humanity: the characters are all tactile, all pained, all reaching for release.

Of particular effect is a lone erotic scene, hearkening to illicit publications like *The Pearl* and to Walter's unpretentious confessional. It is not pornographic, though it is undeniably of the flesh. When it lingers, it does not do so to titillate with some overblown poetic ideal, but to send us back down to earth, to some

awkward moment of recognition, some fleeting scent, interrupting that triumphal chariot ride to whisper an unwelcome *memento mori*.

The confusion of desires, anxieties, and all those compounding, competing thoughts paint such an evocative picture of the characters, in all their glory, fumbling but too filled with anticipation to really care. Too often, authors give us a celebration of something inhuman, something untouchable, rather than a celebration of a moment of true humanity.

Victorian poetry is an unabashed exultation of the impossible, always recalling to me Edith Hamilton's observation in *The Greek Way* that a Greek paramour would no more have said his love were 'beautiful as Venus' than she would have believed it. 'Beautiful as a roadside daisy' is more than enough, and has the added benefit of being true.

As I read along, I found myself comparing it to my own , earlier attempts to write in the subgenre (which I've subsequently expanded into my upcoming novel). As usual, it only goes to show that if you don't read a genre before attempting to write in it, you're bound to cross familiar territory. Happily, I started on a rather different tack, so no complete rewrite is in order.

This is not an easy book to simply rate. I enjoyed it, but to what degree, it's harder to say. In the end, I'm undecided whether this experiment ever exceeded its curious exploration to become a lasting story. As a vision, as a collection of ideas and characters, it is beyond reproach, but there is some faltering in the structure, a lack of cohesion which sometimes proves charming, and other times tiring.

But for all its flaws, at least it is something new, something daring and, if somewhat too large for its confines, at least not too small for them. Odd that, procrastinator that I once was, here I am, late at night, writing a review for no reason at all--and yes, I did get my Shakespeare essay in on time.

Scott says

Ach, I wish I could recommend this book more highly, but I was very disappointed in it.

Perhaps my expectations were too high, given how much I loved Gibson's "Neuromancer." However, "The Difference Engine" was over-long. The plot threaded together slowly. The character development of central characters was fragmentary and tended toward the superficial. The writing of the action scenes was unbelievably bad - the reader could barely piece together what was happening, and it almost made no sense. The denouement provided no satisfaction. I almost laughed aloud at Lady Ada giving a lecture talking about "resistors" and "capacitors" using the modern terminology as a possible way forward with computers. As I closed the book I had the distinct sadness that I had wasted two weeks of leisure reading time that I would not get back again!

I'm sorry if this seems overly critical, but really, when you read something by the author of "Neuromancer," you set the bar a little higher!

Joseph Delaney says

This is based upon the idea that computers were invented much earlier in our history. How would that have changed things? This is a big absorbing read.

Jim says

Sometimes it **really** pays to re-read a book.

I wasn't very impressed when I first read this book. My favorite character at the time vanished with about forty pages left, and I didn't find the end compelling.

I can't remember when I first read the book, but it was years ago. Now that I'm older and have both read more and experienced more, I feel I got a lot more out of the book. I actually found Laurence Oliphant's struggle with his beliefs more compelling than Edward Mallory's accidental heroics. (Although, I have to admit, the moment when a paleontologist became an action hero was quite memorable.) I also didn't understand the significance of the curious MacGuffin "The Modus". Had I realized it before, I probably would have been more impressed.

When I first read the book, I found the ending confusing and unsatisfying. Now, the fact that the end is (minor spoiler) open-ended and leaves a lot open to interpretation just means that you'll spend more time thinking about the book after it's over.

All in all, this is definitely a classic of steampunk, and it definitely deserved its Hugo award nomination. This book has an amazingly detailed alternate-history London with cameos from a number of historical characters, an underground society of "clackers" (steampunk punch-card hackers!), and an eye-opening look at what might have happened if the Information Age started under Queen Victoria.

Mike says

"The Difference Engine" ("DGE") was a real surprise after reading previously published books by both authors. (I had probably only read "Islands in the Net" and the "Mirrorshades" collection by Mr. Sterling at this point.) I can't even tell you (and won't cheat and look up) if this book launched the "steampunk" genre (I suspect not), but even if it wasn't the first, this is a book to judge others by.

Forget its genre or even sub-genre: this is a great book. It has excellent writing, plotting, characterization, and it brings a fresh and exciting look at an age and a set of dry historical facts that amazed me. I'm not giving it an outright "5.0" but I would easily award it a "4.5". There's a memory that I thought it did not flow as well as other books I rate highly. Is that because it was a collaboration or because of its length? I don't know as I sit and type this review. Certainly it is one of the best books you could open and read.

Over the years I have probably read more books or stories set in "steampunk". It's an interesting conceit and one that I find I enjoy because of how the author re-purposes historical people or events. If you find you like the idea, you might try watching, "The League of Extraordinary Gentlemen". It is a bit over-the-top, but neat to see how things get twisted. But I digress. Read this book.

Ben Babcock says

Did you read *Neuromancer* and say, "This was good, but it could have used more steampunk?" That's kind of

how one might describe *The Difference Engine: Neuromancer* meets steampunk. It's not a comprehensive, completely accurate description, but if that's sufficient for you, you can stop reading now and go read the book.

Still here? Cool.

William Gibson is on my "I must read everything by him!" shelf, and his influence on literature, particularly science fiction and subgenres like cyberpunk and steampunk, is unquestionable. One might even go so far as to point out how words he coined or popularized, such as cyberspace, have made their way into colloquial parlance. On top of that, he's more than just a great writer; he's a *good* writer, with stories to accompany all those big ideas. Nevertheless, I gave four stars to *Neuromancer*, and now I'm giving two stars to *The Difference Engine*. What's wrong with me?

(Although this is a collaboration with Bruce Sterling, I haven't read anything by Sterling yet—he is on the list. So I'll be focusing on how this book affects my impression of William Gibson.)

There's *nothing* wrong with *me*! I'm perfect! It's all Gibson's fault. He has this amazing ability to defy my expectations; I never know what I'm going to get from a Gibson story. Despite my best guesses and suppositions, both *Neuromancer* and *The Difference Engine* surprised me, and by the end I realized that Gibson had somehow snuck away while I was reading and come back with an extra portion of crazy ideas and subtext to stuff into the last act. So as much as I enjoy and recognize Gibson's skill, I always tend to put down his books dazed and a little bewildered. Sometimes books like that still manage to earn five stars, but very often they receive only four: they left me with respect and a sense of awe, but they did not make me love them.

I don't really want to discuss *The Difference Engine* as a steampunk novel. Of course, I am aware of its significance to the genre, and the reasons behind that significance are obvious when one reads the book. Gibson and Sterling have essentially laid the ground for the steampunk premise, if you will, of how all the clockwork revolution could take place. Babbage actually manages to complete his analytical engine, which is notable because it is the first design of a computing machine that is Turing complete. This is a big deal, and as with most high-level computer science can get complex rather fast, but here's the gist: if something is Turing complete, then it can in theory be used to solve any computational problem whatsoever. (In practice there are pesky limitations like, say, time.) So Babbage triggers the computing revolution a century early, and Gibson and Sterling doggedly develop the ramifications of this revolution to its logical extremes. Babbage's engines are aggressively analog, not at all the slick and fast electronic and digital devices to which we are accustomed. They are massive and require yards or miles of gears and tape and, yes, punch cards. So time on engines is a precious commodity, and the use of engines brings with it all sorts of logistical problems, such as cleaning and maintenance. Steampunk triggers an irrational sense of ambivalence in me, partly because it always seems to be so garish and flashy: it's got all this cool technology reimagined as neo-Victorian, clockwork gadgets made from gears and pulleys, and it just seems to offend my sense of plausibility. Which is just silly, when you think about it, because I'm willing to read books featuring hyperspace and wormholes and humanoid aliens, so I shouldn't have a problem with steampunk. But we all have our biases, I guess.

But I digress.

So regardless of its steampunk street cred, *The Difference Engine* is a great piece of alternate history. Gibson and Sterling drop hints at what an alt-Victorian London equipped with Babbage engines could be like, from automated advertising on the side of a building to the surveillance-state-like use of citizen ID numbers. And yes, there are airships (warning: TVTropes). Not only is "Lord Babbage" in a position of considerable influence, but Byron is Prime Minister, and he lives long enough to see his daughter Ada grow up to become an influential mathematician. Darwin gets a title too, and in general *The Difference Engine* is a thought

experiment that speculates what would have happened if a more progressive generation of "rad[ical] lords" had inherited the government from Lord Wellington's Tories.

Britain's role in the history of science is fascinating, and the nineteenth century particularly so. The scientific community was even more of an Old Boys' club than it is now, and so all the various great scientific minds knew each other (or at least knew of each other) through the various Royal Societies. They socialized, stole ideas, had public spats, and generally make that period of the history of science look like some kind of MuchMusic drama. This is great for science writers, because it makes for an entertaining way to tell the history of science, and I love reading accounts like this. Gibson and Sterling embrace this same dramatic flair and make the rivalries and alliances among the nineteenth-century men of science one of the central pillars of the story.

All of this *should* make for an amazing story. Alas, *The Difference Engine* falls short of being awesome, and that's particularly fatal when two big names are attached to it. The novel as a whole lacks coherence and unity in its structure and in the narration. Gibson and Sterling connect the lives of three protagonists, but they don't seem in any particular hurry to develop the plot, and the mystery that gets dangled in front of us at the beginning of the book receives a hasty, even token resolution at the very end. As an egregious example of this incoherent style, just consider the first chapter (or "iteration"), which features Sybil Gerard as the protagonist. Sybil is the daughter of a prominent Luddite leader, and since her father's death she has fallen on hard times and become a high-class prostitute. But then she meets up with Mick Radley, secretary to the exiled Texian president Sam Houston. Radley promises her the world if she'll travel with him and become his apprentice, and Sybil, intrigued, agrees.

For the first iteration, Sybil is a compelling protagonist. She's literate and educated and not very naive, but at the same time she is new to the experiences Radley offers (up to and including some acting and theft!). Through her, Gibson and Sterling ease us into their alternate Victorian London. Her vocabulary is memorable but not a distraction from the prose itself. Most importantly, despite her former associations with the Luddites, opposed the sexy technology that has seduced me, I found myself wanting her to succeed. She seemed like a good person, or at least a worthy person. So I was disappointed when, after the end of the first iteration, Sybil gets sidelined for the rest of the book. She returns near the end in a much-reduced role, but she never again takes centre stage to tell her story. The majority of the book falls on the shoulders of Edward Mallory, a paleontologist recently returned from the discovery of brontosaurus in Wisconsin. Mallory is all right as far as characters go, but he's no Sybil, and neither is the third protagonist, Laurence Oliphant. Just as I felt I was getting comfortable with Mallory, Gibson and Sterling switched the focus of the narrative again.

It's much the same for the plot concerning the mysterious Napoleon-gauge punch cards. These first fall into Sybil's possession, and then somehow Ada Byron acquires them, and then they fall into Mallory's hands for safe-keeping. Their purpose is eventually explained, and it's all very clever, but the plot never develops into the mystery I was imagining when I began the book. Instead, the punch cards lurk in the background while Mallory bumbles through a London on the verge of erupting into class warfare. Which is fine, except that I often lost track of what was happening during this time. (To be fair, I read that part while at my nephew's second birthday party, and I had to devote some attention to keeping an eye out for incoming Awkward Social Encounters.)

And then there is the coda, which is brief and very vague. It gives us a glimpse of the future and seems to imply a grim outcome that is consistent with Gibson's skies tuned to a dead TV channel. It's an awesome vision, one that I wish he and Sterling had elaborated upon—but that's the problem. In its present form, it is more non sequitur than anything else. It's a tease without any real substance, and while it fits nicely with the world that Gibson and Sterling have created in *The Difference Engine*, it does nothing to improve the book as a whole.

I think it is OK for books to be cryptic, for books to end with cryptic epilogues, and for books to puzzle the

reader. I can accept not grokking a book, if it's clear the author has done this to challenge me and force me to think about it. And I'm sure there are some people who feel this way about *The Difference Engine*, that its scattered narration and perplexing plot are what elevate it above newer steampunk works. For me, though, once you strip away the parts that don't work, the elements of this book that seem superfluous or faulty, there is very little left that I can enjoy. There is an alternate Victorian London built upon a very nifty premise; there are secondary characters and allusions to historical figures that tickle the scientist within me. And while I have my misgivings about the story, I really did enjoy the tone and diction, both of which really helped immerse me in the world. Mostly, though, *The Difference Engine* left me with too many regrets.

Kat Hooper says

ORIGINALLY POSTED AT Fantasy Literature.

William Gibson and Bruce Sterling, two major SciFi powerhouses, joined forces to produce *The Difference Engine*, a classic steampunk novel which was nominated for the 1990 British Science Fiction Award, the 1991 Nebula Award for Best Novel, and the 1992 John W. Campbell Memorial Award and Prix Aurora Award. I listened to Brilliance Audio's version which was produced in 2010 and read by the always-wonderful Simon Vance.

The Difference Engine takes place in a nearly unrecognizable Victorian England. The fundamental "difference" between this alternate history and the real one is that Charles Babbage succeeded in building his Difference Engine — the first analytical computer. Thus, the information age develops (along with the industrial revolution) in the social, political, and scientific milieu of the 19th century. This little historical event — the development of the steam-powered computer — has a vast impact on subsequent history: Meritocracy takes hold in England (you'll recognize many of England's new "savant" lords), the American states never unite, Karl Marx makes Manhattan a commune, Benjamin Disraeli becomes a trashy tabloid writer, and Japan begins to emerge as a world power with England's help.

The idea of an earlier technological revolution affecting the course of history is fascinating. But the best part of *The Difference Engine* is the flash steampunk setting: full of gears and engines, pixilated billboards and slideshows, unreliable firearms, and lots of rum slang that's right and fly.

The problem with *The Difference Engine* is the plot. It meanders slowly and strangely and is vaguely focused on a box of computer punch-cards which contain unknown important information. Several people are interested in the cards including Sybil, a courtesan who's based on Benjamin Disraeli's Sybil, mathematician Ada Lovelace (daughter of Lord Byron), a paleontologist nicknamed Leviathan Mallory, and the author Laurence Oliphant. Unfortunately, Mallory, who ends up being an Indiana Jones type of character, is the only one who's interesting or likable. His segment of the novel has some exciting moments, but they seem only tangentially related to what comes before and after.

Most of the events seem random, obscure, and unconnected. Perhaps the book is not at all about plot, though, because the authors seem to be trying to make a clever association between Gödel's mathematical theorems, chaos theory, punctuated equilibrium, and artificial intelligence. I'm not really sure... If this is truly their intention, it is too thickly veiled and probably imperceptible to many readers. The Matrix-like ending will leave most people scratching their heads and wondering why they spent so many hours reading such inaccessible stuff.

The Difference Engine is a smart and stylish concept novel that just doesn't quite work.
