

Glasshouse: Stross – Never Dross

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In 2008 I wrote a glowing commentary<
http://www.mekabay.com/nwss/623_halting_state_a_good_read_for_security_geeks.pdf >
about Charles Stross's< <http://www.antipope.org/charlie/fiction/faq.html> > 2007 novel *Halting State*< <http://www.amazon.com/Halting-State-Ace-Science-Fiction/dp/0441016073/> >.

I've just finished reading an earlier work by Stross, *Glasshouse*, originally published in hardback by Ace and also available in paperback< <http://www.amazon.com/Glasshouse-Charles-Stross/dp/0441015085/> >, Kindle< <http://www.amazon.com/Glasshouse-ebook/dp/B001161L6O/> > and audiobook< <http://www.amazon.com/Glasshouse/dp/B004YLYJ4O/> >. I think readers with an interest in computing, information assurance, and nanotechnology will find it immense fun.

I'd hate to spoil the book for readers by giving too much detail about the plot; I'll just quote a short summary posted on Amazon:

When Robin wakes up in a clinic with most of his memories missing, it doesn't take him long to discover that someone is trying to kill him. It's the 27th century, when interstellar travel is by teleport gate and conflicts are fought by network worms that censor refugees' personalities and target historians. The civil war is over and Robin has been demobilized, but someone wants him out of the picture because of something his earlier self knew. On the run from a ruthless pursuer, he volunteers to participate in a unique experimental polity, the Glasshouse, constructed to simulate a pre-accelerated culture. Participants are assigned anonymized identities: it looks like the ideal hiding place for a posthuman on the run. But in this escape-proof environment, Robin will undergo an even more radical change, placing him at the mercy of the experimenters--and the mercy of his own unbalanced psyche.--From publisher description.

Stross appeals to our inner geek: he packs his book with interesting tidbits [US readers, don't get excited: that's what we write as *tidbits*] that are fun for the technically literate. For example, there's a note before the start of the novel proper that gives the reader translations from the 27th century's time measurement units; here are some of them:

- 1 second: "... The time taken for light to travel 299,792,458 meters in vacuum;
- 1 kilosecond: 16 minutes;
- 1 megasecond: 11 days, 6 hours;
- 1 gigasecond: 31 Earth years.

Here are some of the neat technologies introduced in the novel in the first few pages (the names I've given to the techniques are not necessarily those used by the author):

- Modifying bodies to suit functional needs or personal preferences: "A dark-skinned

human with four arms walks toward me across the floor of the club, clad only in a belt strung with human skulls. Her hair forms a smoky wreath around her open and curious face. She's interested in me.”

- Identity restructuring: “It's tough, not being able to tell the difference between your own thoughts and a postsurgical identity prosthesis.”
- Backing up one’s entire memory – so as to be able to regenerate a fresh instantiation of oneself if the current body dies unexpectedly: “I emigrated to Zemlya right after my previous memory dump.”
- Metempsychosis: “I haven’t been human for long.... I just moved here from Zemlya.... For my surgery.... I was an ice ghoul.”
- Information transfers at transluminal velocity: “Traffic between polities, like traffic within a polity, passes over T-gates, point-to-point wormholes linking distant locations.”
- Matter disassembly and reassembly [US spelling in original]: “My job, as part of the frontier guard, was to make sure that inbound travelers went straight into an A-gate – an assembler array that disassembled, uploaded, and analyzed them for threats, before routing them as serial data to another A-gate on the inside of the DMZ for reassembly.”
- Nanoscale engineering: “The ability of nano assembler arrays to deconstruct and replicate artifacts and organisms from raw atomic feedstock made them virtually indispensable – not merely for manufacturing and medical purposes, but for virtual transport (it’s easier to simultaneously cram a hundred upload templates through a T-gate than a hundred physical bodies) and molecular firewalling.”
- Malware affecting gates – self-reproducing programs have affected A-gates by censoring memories and ideas in the reconstructed entities: “Even when war exposed them to subversion by the worms of censorship, nobody wanted to do without the A-gates – to grow old and decrepit, or succumb to injury, seemed worse than the risk of memory corruption.”
- Sophisticated artificial intelligence: “Today's therapist isn't remotely humanoid, not even bushujo or elven; Piccolo-47 is a mesomorphic drone, roughly pear-shaped, with a variety of bizarre-looking extensible robot limbs – some of them not physically connected to Piccolo's body – and nothing that resembles a face.”
- Synthetic pheromones to affect people’s moods: “Piccolo-47’s voice oozes with reassurance. I'm pretty sure it's emitting a haze of feel-good pheromones....”

Without revealing any more of the book’s details, it’s a wonderful read for technophiles. Stross routinely assumes knowledge of security and networking concepts in the way that 19th century authors incorporated hydraulics and pneumatics, early 20th century writers included airplanes and radio, and late 20th century science fiction novelists took computers and data networks for granted.

Stross has an extensive list of novels; they are described on a frequently-asked questions page <<http://www.antipope.org/charlie/blog-static/fiction/faq.html>> in his blog. I heartily recommend his work.

Enjoy!

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