

For both articles below, on a separate sheet of paper:

- (1) Summarize each in one paragraph, 5-6 sentences, including only the most important details.
- (2) Write a 1-paragraph reflection, 5-6 sentences, about your thoughts on the articles. For example, discuss if you agree or disagree with the information written (ie. SciFi is relevant for people to watch, the audience for this genre has changed, etc.), and possibly the impact SciFi films have on society.

Due Tuesday, March 14th.

Audiences grow real for science fiction and fantasy

The National - February 3, 2010

Step down, nerds. Put out your light sabres. Science fiction and fantasy are no longer solely your preserve. A British survey has revealed that both genres are becoming more acceptable in normal society, with sales of science fiction and fantasy novels growing by almost 20 per cent in the past five years. Now, says the Mintel survey, nearly one in three children and teenagers will admit to enjoying these kinds of books without fear of being given a wedgie and booted in the playground. (It doesn't say the last part, but come on, admit it: that's the treatment such geeky admissions earned you before now.)

And the cause of this mysterious development? Call it the Twilight effect. For those who do not enjoy the faculties of sight or sound, Twilight is, of course, the hit book series about vampires, penned by the American author Stephenie Meyer. On the last stocktake, it had sold a zillion copies in as many languages around the world. Then came the film instalments. Now, the first two of four planned screen adaptations have been unleashed on the fluttering hearts of every teenage girl on the planet. No doubt there are mud huts in remote South African villages with posters of Robert Pattinson draped across them.

The spectacular success of the Twilight juggernaut has generously spread itself out, boosting sales of other science fiction and fantasy books. In recent years, the British writer Neil Gaiman has inched up the Amazon sales chart with his Sandman comic book series. The Mintel analyst Pat Neviani-Aston cited authors such as Anne Rice, Ramsey Campbell and Ted Naifeh as other examples of those helping the trend along.

So why have they all become more popular now? Such novels have always been a good source of escapism. But now more than ever, the stories have become believable. Gone are the wart-ridden aliens and fire-breathing dragons of yesteryear. Out with the twee, squeaking ewoks of Star Wars and the pointy, rubber ears from the good Starship Enterprise. Twilight takes an ordinary girl, Bella, living a fairly normal American teenage life until she goes and falls in love with a vampire. But the vampires in this story don't wander about in Gothic cloaks with blood dribbling from their mouths. They join in at school, play sports and drive cars.

"Oh, why can't we have a vampire boyfriend?" moan young girls (and plenty of fully grown women) after falling for Edward Cullen in Twilight. The increased popularity of the genres is showing on the small screen, too. The revamped Doctor Who on the BBC has been a runaway success in recent years, and other television shows such as Battlestar Galactica, Heroes and even Lost are said to have helped boost science fiction's tarnished reputation. It's now perfectly socially acceptable, for instance, to watch the Sci Fi Channel.

As ever, Hollywood is also muscling in on the action, most recently, with the inescapable popularity of Avatar. But 2010 will be continue to be marked by other big-budget fantasy or science fiction films. There is Inception, a Christopher Nolan film that is being called a "contemporary sci-fi" flick. The tagline? "Your mind is the scene of the crime." Ooh, spooky. Then there's Tron Legacy, a sequel to the 1982 film Tron, and a vampiric adaptation of Tom Stoppard's Rosencrantz and Guildenstern Are Dead, drolly entitled Rosencrantz and Guildenstern Are Undead. And Simon Pegg will rear his shiny head with Paul, a film about two comic book geeks who discover an alien while travelling across America.

Resistance is futile, people. Best get in on some nerd action now.

2013

SAN FRANCISCO — A woman slides into what resembles a tanning bed for a quick health diagnosis and instant treatment. Traces of cancer are found — and removed immediately.

On another planet, in a galaxy far, far away, people communicate faster than the speed of light with a device called an Ansible.

Both futuristic scenarios are delivered to you courtesy of Hollywood in the science-fiction film *Elysium*, which premieres in cinemas across the nation today. But if the past few decades of film are any indication, the fiction seen on the screen this weekend might become fact 10 or 20 years down the road.

Before you scoff at this notion and hop on your iPad to watch a live feed from across the planet — remember when *that* would have seemed far-fetched? — consider how science-fiction films from the recent past have accurately predicted how we live and work today.

Google Glass, the driverless car and robots all had roots in films such as *Blade Runner* (1982), *Back to the Future* (1989) and *Total Recall* (1990). Indeed, engineers and designers at Google, Apple and elsewhere will tell you that these far-out-there films fed their imaginations and helped — at least in part — fuel the technology explosion of the past generation.

"You see so many dreamers today because there are so many ideas floating on social media. It's bred a much faster cycle of what-ifs?" says Justin Maguire, lead designer for Frog Design, which helped create the look for Apple Macintosh computers and the Sony Trinitron TV set. "There's almost nothing we can't build today."

An evolution in the way tech companies now develop products — with an emphasis on bold design, simplicity and ease of use — has been sparked, in part, by sci-fi films of yesteryear. Who knows? An onslaught of forthcoming films such as *Elysium*, *Ender's Game*, *Riddick* and *Gravity* might offer a peek into the next few decades, according to experts in tech and sci-fi.

"I grew up obsessed with *Star Trek*, so naturally when I bought my first smartphone I immediately set the background to look like a tricorder (a handheld device used for sensor scanning and data analysis)," says Matt Carver, 30, senior technologist at Big Spaceship, a creative-design agency in Brooklyn, N.Y. "Watching (*Star Trek* character) Geordi LaForge effortlessly swipe and tap his touch-screen computers is still the inspiration for a lot of how I want users to feel when they interact with a site I've built."

Sci-fi movies from the previous four decades offer an uncanny glimpse of the future worlds of robots, health care, travel and warfare. For instance, experts now predict that within 10 years general-purpose robots — at \$25,000 to \$30,000 per unit — will perform household chores while consumers are at work; or serve as butlers at cocktail parties.

"We are putting robots into people's lives," says Sarjoun Skaff, co-founder and chief technology officer of Bossa Nova Robotics, which is developing a robot maid modeled after *The Jetsons'* Rosie for less than \$5,000.

A particularly fertile period for sci-fi films was the 1970s, '80s and '90s, a time when computers, transistors and space exploration made enormous strides, says Jaron Lanier, who coined the term "virtual reality" and founded VPL Research, the first company to sell virtual-reality goods in 1984. He consulted on *Minority Report*, where he built prototypes for a glove interface Tom Cruise used to swipe commands on a virtual screen, as well as 3-D ads on digital surfaces that appeal to the desires of individuals as they walk by.

The grandeur of *Star Wars* (1977) "prompt you to dream," says 30-year-old Chris Petescia, co-founder and chief product officer of Carrot Creative, a digital-agency in Brooklyn. "Designers have visions, but they are often based on things they think are practical."

The firm's design for the Hue HD Webcam — a goose neck connecting the camera to the top of a laptop — was inspired by robots with tentacles in *The Matrix* and invading spacecrafts with long necks from Steven Spielberg's 2005 version of *War of the Worlds*, says Petescia, who was 24 when he designed the Hue.

THE FUTURE? LOOK AROUND

At warp speed, the world as we know it has been upended by technology. Just look inside a consumer-electronics store, on the road, inside a hospital — or up in the sky, for that matter.

Start-up SpaceX is taking the film *2001*'s notion of commercial space exploration to the stars. SpaceX, the brainchild of Elon Musk — who hatched California-based companies Tesla Motors and Solar City — is developing reusable launch vehicles. Experts say they'll make spaceflight cheaper and more efficient.

"The vision of Arthur C. Clarke (whose short story led to *2001* in 1968) is very real, and possible, today," says Silicon Valley venture capitalist Steve Jurvetson. He serves on the board of SpaceX and is an investor in SpaceX and Planet Labs, which intends to map Earth with a fleet of tiny satellites.

Flying cars are the way to get around Los Angeles in *Blade Runner*, a film about a private detective in pursuit of malevolent androids set in 2019. In the real world today, start-up Terrafugia's flying car is getting closer to its maiden test flight. (2019, anyone?) But you'll need a pilot's license to fly the two-seat car-plane hybrid, with foldable wings, that can fit into a garage. And, oh, about \$279,000 to buy it.

Closer to Earth, self-driving cars took to the roads in *Total Recall* (1990). Now, they're being tested in Nevada as driverless Google cars. The genesis of Google Glass has taken form in movies ranging from *Ghostbusters* (1984) and *Terminator* (1984) to *RoboCop* (1987) and *They Live* (1988). Cloning (*Replicant*, 2001) and prostheses (*Star Wars*, in which Luke gets a new arm, and *Terminator*) also are rooted in recent films.

Examples abound, but several themes stand out:

- Ubiquitous advertising. *Blade Runner*'s depiction of a cramped, urban setting foresaw digital advertising on flat surfaces such as buildings, says Craig Phillips, a San Francisco-based film writer, blogger and screenwriter. "Living, breathing ads are seemingly all around us," he says.

Consider NanoLumens, whose flagship product is the world's first flexible LED screen, which lets it show video display on a curved wall at the NASCAR Museum in Charlotte, company CEO Rick Cope says. China, home to some of the world's largest buildings, is a prime candidate for even larger displays, says Jeff Demain, director of business development for silicon photonics at Intel.

- Video screens. *Back to the Future II* won't be confused with *Star Wars*, but it's crammed with holographic 3-D movies, videophones and social media — in the form of a Skype-like TV chat where personal details roll across a screen. iPad and iPhone have made this once-futuristic technology a way of life for hundreds of millions of people.

- Robotic warfare. *Short Circuit* (1986) predicted the use of robotic machines on battlefields. The U.S. military is ramping up plans to make that a reality — over the next decade — with drone warfare. Squadrons of unmanned planes will swarm enemy sites like killer bees, launching missiles and avoiding detection with sophisticated jamming devices, according to Loren Thompson of the Lexington Institute, a non-profit think tank in Arlington, Va. Also

under development: Self-programmed submarines that replace dolphins to detect and disarm mines, and robotic mules the size of pickups to haul ammunition, medical supplies and food, Thompson says.

"With the exception of time travel, just about every technological concept explored in science-fiction movies about the military is becoming reality," he says.

- Medical devices. Bones McCoy, the chief medic on *Star Trek's* USS Enterprise, used his tricorder like today's doctors use the stethoscope. Silicon Valley startup Scanadu has created a tricorder-like scanner filled with sensors that can read vital signs and send them by wireless to a smartphone in seconds. Today's medical technology — think DNA sequencing, MRI scanners and laser surgeries — oftentimes makes us feel as if we've living on a sci-fi set.

GAINING INSPIRATION

Though predicting the future is often seen as a fool's errand, it's really not that difficult, sci-fi experts say. Often you need look no further than the "based upon a story" movie credit.

"The best predictive movies are based on well-thought-out books or short fiction by some of the best minds of speculative fiction," says science-fiction writer Frank Catalano, pointing to Philip K. Dick (whose stories inspired *Blade Runner*, *Minority Report*, *Total Recall* and *The Adjustment Bureau*) and Frank Herbert's *Dune* series.

Dick and the late Gene Roddenberry, who created *Star Trek*, have profoundly influenced designers and engineers, says Thomas Vitale, executive vice president of programming and original movies at NBC Universal's Syfy & Chiller channels.

"Go back to *Things to Come* (1936) and *Metropolis* (1927), where rocket ships were rolled out," says Greg Bear, author of more than 30 novels on science fiction and fantasy, and part of the founding advisory board for the Science Fiction Museum in Seattle.

"You can trace the influences more than 50 years to (writers) like Isaac Asimov, Robert Heinlein, Jules Verne, H.G. Wells," Bear says.

The best movie in predicting the future? Based on science-fiction experts, futurists and a poll conducted in *Popular Mechanics*, it's *Gattaca* (1997), which explored the very delicate scientific and moral tug-of-war when it comes to genetic profiling — a subject that gains greater weight with each passing day.

"Some things are dead-on," says Lynda Weinman, who worked on special effects for *Return of the Jedi* (1983) and *Star Trek IV: The Voyage Home* (1986), among other movies. "Look at a tricorder in *Star Trek*; it reminds me of an iPad. Then, there's the video phone in so many movies, which we have with smartphones."

Then again, envisioning the future can come down to dumb luck.

Though Phil Tippett helped mold the cultural zeitgeist — and gave millions an action-packed glimpse of the future — as a visual-effects supervisor on the first Star Wars trilogy and *Jurassic Park*, he jokingly admits, "I'm not much of a futurist."

"It's a big turn from doing visual effects to anticipating what will happen," says Tippett, a two-time Academy Award winner who traces his interest in the craft to animation pioneer Ray Harryhausen and Star Wars creator George Lucas. "It often comes down to (the imagination of) the writer, director and stage designers."