Lost in the Void:
The Unfortunate Trajectory of the Space Sim Game
by Adam LaMosca

Footprints in Moondust
by Phillip Scuderi

My Own Private Galaxy
by Pat Miller

Development in a Vacuum
by Shannon Drake

also:
Editor’s Note
Letters to the Editor
Staff Page
One of the first space games I remember playing was Sierra’s *Space Quest*. I took on the role of *... ahem* Sanitation Engineer in what I assumed to be a distant future where space travel was the norm. I escaped the hostile-alien-overrun ship, terribly dismayed at the now bloodied state of my once clean floors. Damn aliens. I made my way in my escape pod to the desert planet, and quenched my thirst on the evaporated water when I got thirsty. Hey, it could happen … it’s the future.

See, that’s the neat thing about space games. Because our own experiences are the lens through which we view most things, space games are inherently the future. Yes, we’ve made tiny little forays into space, but certainly nothing so great as to require a Sanitation Engineer as part of the crew. One might say we’ve made baby steps into the infinite possibility that is space, and that perhaps the future holds more.

Other genres, well, I can’t prove that there ever were elves or orcs. I can’t prove the Missing Link (it is “missing,” after all) either, but scientists seem bound and determined it existed. And some of those same scientists found remains of a dwarf-like or hobbit-like species not too long ago. So, while it may be improbable, it’s still possible the denizens of many fantasy realms did once inhabit our world.

The point is, they are not inherently future, and therefore not completely open to possibility and interpretation in quite the same way space is. Space is fertile ground for, well, anything. Especially games. Which is why we have devoted this week’s issue of *The Escapist*, “In Spaaaace,” to games set … in space. Allen Varney writes in about one of the most beloved space games of all time, *Wing Commander*. Adam LaMosca travels through a brief history of space sims, recounting some of the ups and downs over time. Also, Shannon Drake talks with the members of *EVE Online*’s development team at CCP. Find these articles and more in *The Escapist*.

Cheers,

Julianne Greer

In response to “Kill Your Darlings” from *The Escapist Forum*: I’m a dissatisfied gamer. Games are getting stagnant. Surprisingly though I couldn’t disagree with this article more.

To use an example Will Wright uses when talking about game design, the overt metaphor of ‘Sim City’ is a city planning simulator but the underlying game is more akin to gardening. The game plays by choosing where to plant your buildings, watching your city grow, and weeding out slums or anything else you don’t like. This discrepancy isn’t a flaw of ‘Sim City’, the point being made is that there is a difference between the premise of a game (the overt metaphor) and the gameplay itself (the underlying part of the game). To put it very simply if you remove everything that doesn’t affect the mechanical decision making process you are left with the gameplay.

The thing that bothers me reading this article is you can’t have a great game without both an overt game and an underlying game... Figuring out the game and improving your gameplay exercises the same part of your brain you used as an infant when you tried to figure out how your toys worked. Taking the health bar away is murdering the underlying gameplay in order to get a superficial improvement by making the game look more realistic. The value of immersion is misunderstood anyways. While I do get a
sense of fun when I pretend I’m actually the main character that illusion is almost entirely due to my imagination - not more realistic appearances - and moreover that sense of fun is *not* a game.

- dosboot

In response to “Kill Your Darlings” from The Escapist Forum: There seems to be a lot of talk about immersion in games of late and I just wonder if maybe I missed something in what immersion should be. In my experience of games (RPGs being my favorite) stats and health bars etc weren’t really detracting from the game or my own immersion in it. They were just displaying information that was required for me to make a decision which in fact immersed me even further in the game.

- avocado

In Response to “Sound Off: Where Will We Be in 2020” from The Escapist Forum: I honestly think we’ll have a more unified gaming front... We’ll be able to play a “game” on the console, but then we’ll switch it into standby mode and download the portable engine to a handheld device. We can then focus on the same game on the handheld, lowered graphics, but it will allow us to gain power ups/certain minerals throughout our GPS range.

When we get to work, we can plug in our handheld to the work computer, and occasionally click something to continue mining/crafting/etc.

We will be completely connected, we won’t have multiple computers. We’ll have multiple PC’s accessing a single server/computer unit. We may even, depending on the advent of Fiber Optics, completely lose the hard drive -- save on mobile technology and backup.

- phoenixsflame

In Response to “Sound Off: Where Will We Be in 2020” from The Escapist Forum: If I put my pessimistic hat on, I think we’ll all be fighting a war of survival while Western Civilization collapses by then. I’ll take that hat right back off now, though.

Optimistic hat.

Crikey. When I think about how much videogames and technology have changed in the years I’ve been playing with them, it’s almost impossible to predict where things may go. Anything is possible. Around the launch of PS2/XB/GC, I made an argument on the interweb that the hardware itself wasn’t going to provide us with any new experiences, which I felt was pretty much unlike most other generational leaps in videogaming technology. I’m more confused by the issue with this generation.

Taking that forward, I think that hardware and technology implementation will pretty much lead the way, with the games themselves using that technology in new and exciting ways. It could be simple connectivity, it may be the convergence of interface types (glasses with HUDs and full body controls) or it could even be the realization of the Hollywood dream (holodecks). Whichever
it is, I think the driving force will be immersion and intuitiveness; anything that gets in the way of the game, regardless what genre it is or what the aim is.

Ultimately, I hope that we actually get back to the purity of "old skool" gaming, but mixed with the technology of tomorrow.

- hitchhiker

In Response to "Sound Off: Where Will We Be in 2020" from The Escapist Forum: The future will bring a resurgence of the arcade, but in a different way. Experiencing something with others is obviously powerful - look how SSBM or MMOs can turn simple gameplay into a lot of fun. Maybe single player games will become less stagnant, and receive input from other players like Spore.

- wyrmwood

In Response to "Sound Off: Where Will We Be in 2020" from The Escapist Forum: I’m going to predict more of the same. With the net as it is I can’t see people expecting something vastly different. Also my generation will grow up used to the net, and it will be what we expect, and what we’ll be given.

Maybe teenagers will have something crazy and different, but we won’t understand.

- bob_arctor
Chicago, summer 1990. The quiet aisles of the Consumer Electronics Show grew suddenly loud when Origin Systems turned on its sound system. Stirring music, volume at 11, blared across the trade show hall. The upstart game company, best known for the *Ultima* series of fantasy roleplaying games, was playing the soundtrack from its forthcoming starfighter simulator, *Wing Commander*. A bank of monitors showed the demo of a Terran Confederation spaceship cockpit, and its view of beautifully rendered enemy Kilrathi ships diving and swooping with amazing speed.

At the LucasArts booth – or Lucasfilm Games, as it was then – a programmer ambled away from the demos for the imminent *Star Wars: X-Wing* starfighter game. *X-Wing* was weeks away from going gold, and would easily make the 1990 Christmas season. Like a stately elk, the coder approached the Origin booth, momentarily surveyed the *Wing Commander* monitors and ambled on.

A few minutes later, the programmer returned with another stately Lucasfilm coder. They chatted politely (over the deafening music) with the young Origin employees; now and then, they glanced at the *Wing Commander* monitors; they departed.

Trade show officials asked Origin to reduce the volume. Booth staffers turned it down until the officials left, then gradually amp ed back to full. Meanwhile, six Lucasfilm staffers gathered before the monitors in silence; in silence they departed.

The next day, companies in the booths near Origin’s brought their own sound systems in self-defense. The once-dignified halls of the Consumer Electronics Show turned raucous. That day, the entire Lucasfilm booth staff, including every senior producer at the show, huddled in a tight, silent knot before the *Wing Commander* monitors. They watched for a long time. They departed.

A former Origin employee recalls, “You could see the fear in their eyes, as they walked by. We joked about how cool they tried to look, the faux nonchalance. You knew they were afraid.”
After the trade show ended, Lucasfilm Games unexpectedly announced *X-Wing* required much more work and would not make Christmas. It finally shipped years later, in 1993.

That was the debut of *Wing Commander*.

**Wunderkind**

Born in 1968, Chris Roberts had been a professional game designer since he was 13, when he sold small games in BASIC and machine code for the BBC Microcomputer. Origin published Roberts’ Commodore 64 RPG, *Times of Lore*, in 1988 and his post-holocaust RPG, *Bad Blood*, in 1990. For his next project, Roberts envisioned an *Elite*-style game, initially called *Squadron* and then *Wing Leader*, that would combine arcade-style space-fighting, innovative music, great graphics and a cinematic storyline; he loved movies.

With programmer Paul Isaacs, writer Jeff George, artist Denis Loubet and a team considered large for the time – 11 people! – Roberts pursued his vision with focus and cleverness. He decided to handle each spaceship not as a polygon-based 3-D model, but as a collection of sprites (images) that showed the ship from all angles. These looked better and would run faster, because the computer need not calculate the images in real time. “It took about two months of 16-hour days to come up with the rotation and scale routines for the bit-mapped images,” Roberts said in a 1992 interview. “I think the bitmaps were what helped give the game its movie-type feel.”

Like every Origin release, Roberts’ new game aggressively embraced advanced tech: The DOS version required (required!) EGA graphics and a full 640K of RAM!

Roberts’ new game aggressively embraced advanced tech: The DOS version required (required!) EGA graphics and a full 640K of RAM!
Kick back, share your thoughts and experience even more of what you love at the official blog for the magazine!

blog.escapistmagazine.com
night, every night, making for a different and better demo every day of the show. That was the commitment and madness that made Chris a great developer.”

Published in 1990, *Wing Commander* – changed from *Wing Leader* for trademark reasons – scored a brilliant success. It spawned a six-year, multi-million-selling franchise: Three direct sequels; the companion games *Privateer* and *Prophecy*, plus numerous expansions; 10 novels; and a 1996 animated TV series, *Wing Commander Academy*.

Newly wealthy, Roberts bought four expensive cars and an estate outside Austin, Texas, named Commander’s Ranch.

II, III, IV ...

Later games in the series kept pushing the hardware frontier. *Wing Commander II: Vengeance of the Kilrathi* introduced spoken dialogue to computer games; the *Wing II Speech Accessory Pack* became the first killer app for the Creative Labs SoundBlaster. *Wing II*’s story, too, moved into new territory. Ellen Guon Beeman, the game’s assistant director and lead writer, took a cue from players’ Rorschach-blot interpretations of *Wing I*’s characters. “I spent a lot of time lurking on the *Wing Commander* fan forums on GENie and Compuserve. Some guys talked about how the character Angel really had something going for the hero. I went back to the scripted text for *Wing I* and searched for that scene. I couldn’t find anything that hinted at romantic interest, it was just a scene in which Angel described how to fight a particular Kilrathi ship. But after talking about it, [director Stephen Beeman] and I decided to create a full cinematic story, including the planned death of a major character and a love interest.”

*Wing II* also used rotoscoping for its cut-scene animations. Stephen Beeman recalls, “We used people around the office, filming them with a camcorder, capturing with a really primitive capture card, and painting over the vidcaps in Deluxe Paint, frame by frame.

“The best part of the rotoscoping came when we filmed the scene at the end of *Wing II*, where Angel punches Jazz. Jackie Chapman, one of Origin’s marketers, was playing Angel, and we had Chris play Jazz. Needless to say, neither of them was a trained Hollywood stunt person, so when Jackie threw that punch, it didn’t breeze past Chris the way we intended – it socked him right in the nose! Naturally, that’s the take we used.

“The fans should be pleased to know Chris literally put his blood, sweat and tears into that game. The rest of us settled for just the sweat and tears.”

Roberts’ commitment to innovation peaked (this time without injury) in 1994’s *Wing Commander III: Heart of the Tiger* and 1995’s *Wing Commander IV: The Price of Freedom*. In these two hybrid game-movies, with branching storylines told in ambitious full-motion video (FMV), Roberts aimed for a true cinematic space-opera experience. The games starred Mark Hamill, Malcolm McDowell, John Rhys-Davies and (in *III*) porn star Ginger Lynn Allen.

Filming in Hollywood with multi-million dollar budgets unprecedented in computer gaming, Roberts directed the FMV sequences, shooting live actors in front of a greenscreen and later inserting computer-generated backgrounds; a decade later, this technique would become common in Hollywood. (*Wing IV*...
also used 38 actual sets.) Roberts paid only passing attention to the games themselves, which were produced and directed by Origin staffers in Austin. He focused on learning filmmaking.

Spector recalls, “The very first day I met Chris” – in 1989, well before the first *Wing Commander* game – “he said, ‘Someday I’ll be making movies.’”

**Moving Into Movies**

Riding high on the success of *Wing III* and *IV*, Roberts left Origin in 1996. Together with his brother, Erin (*Privateer*), and Origin Producer Tony Zurovec (*Crusader: No Remorse*), he founded a new media company, Digital Anvil, in posh offices on high-rent South Congress in the heart of Austin. While Digital Anvil worked on several games in a publishing deal with Microsoft, Chris Roberts quickly undertook a *Wing Commander* feature film.

We often forget how recently electronic games were invented. In 1996, the commercial field was hardly 25 years old. Roberts was 28. Imagine a gifted young creator from the dawn of film who arrives in today’s Hollywood ready to tell a story using the best techniques from 1915.

Stephen Beeman observes, “Sketches can be just as artistic as oil paintings. Everything about *Wing Commander* – the plot, dialogue, graphics, action, AI, sound – was a sketch of *Star Wars*. Like a good sketch, it captured just enough of just the right details to let your mind fill in the rest.” (Think of the fans imagining Angel’s romantic feelings where none were written.) “There’s a gap between sketches and painted masterpieces where the art has too much detail – your mind ‘flips’ and starts focusing not on the art but on the ways it falls short of perfection.”

Sketching and painting are different skills – like game design and filmmaking.

The 1999 *Wing Commander* movie starred Freddie Prinze, Jr. Filmed in Luxembourg at a cost of $30 million, it grossed $11.6 million domestically, drew poor audience reaction and suffered merciless reviews. (Rotten Tomatoes score: 7%, Metacritic 21%). His directorial career stillborn, Roberts returned to Austin and worked (slowly) on an ambitious open-ended space sim in the *Privateer* mold, *Freelancer*.

In 2002, two and a half years behind schedule, Roberts left Digital Anvil, citing creative differences with Microsoft. (Microsoft released *Freelancer* later that year to mildly favorable response.) Roberts co-founded a Beverly Hills production company, Ascendant Pictures. His partners’ production credits included *The Watcher*, starring Keanu Reaves (Rotten Tomatoes score 12%); *Half Past Dead*, with Steven Seagal (3%); and the first *Dungeons & Dragons* movie.

Ascendant’s website claims involvement in the production and/or financing of 16 feature films; nine of these have now been released. The eight released films with known budgets had a total cost of $202 million; the aggregate world box office gross for all nine films was about $189 million. Review scores on Rotten Tomatoes and Metacritic range between 25% and 73%; the average score, if that means anything, is 48.5%.
The Wing Commander game series predates these review sites, but you can make book: Every one of Roberts' Wing games would score over 73%.

Wing Commander Today
In the years after Roberts left game design, Electronic Arts discarded the Wing Commander property during its prolonged exsanguination of Origin. The last release was Prophecy Advance for the Game Boy Advance in 2003. Microsoft assimilated Digital Anvil in 2005.

But fandom lives on. A few hundred fans have sheltered in the copious Wing Commander Combat Information Center and the German site WCRevival. Multiple daily news stories, lively forums, an active mod scene – you’d think the ship was still flying. In addition to an online encyclopedia and scads of fan fiction, CIC modders have created Wing spacecraft for Homeworld, X-Wing Alliance, Star Trek: Armada and the Macintosh game Escape Velocity: Nova. Most interesting are the new games and expansions. Among many:

• Unknown Enemy, a 2003 mod using the engine from Prophecy.
• Standoff, an ongoing set of mods based on the Secret Ops online expansion for Prophecy. Includes a global ranking system.
• Flight Commander, a full-featured space engine created by NASA programmer Ed Benowitz.
• Privateer Gemini Gold, a cross-platform fan remake of the original Privateer with updated graphics.

Roberts’ Freelancer also has an active modding community at Lancers Reactor. Turn down your speakers before you visit.

The Price of Freedom
Sad is the mismatch of aptness and desire. With the Wing Commander series, Chris Roberts the game designer repeatedly pushed the field forward on several fronts, achieved unprecedented success and defined a genre. He proved a spectacularly gifted creator. Few designers of comparable stature have simply walked away at the height of their powers – and to so little purpose. After seven years in the field he loves most, the movie business, Roberts the filmmaker has proven – at best – by the friendliest, most forgiving standard, an incidental figure. Yet, though he remains fond of the Wing Commander universe, he has expressed no plans to resume game design.

Possibly, this is for the best. Possibly, gaming has evolved so far, Roberts would have nothing more to contribute. Given his record, that's extremely doubtful. We may never know. But ongoing fan efforts signify Wing Commander’s lasting hold over players’ imaginations. They testify to the vision of the designer who transformed computer gaming, and then abandoned it.

Allen Varney designed the PARANOIA paper-and-dice roleplaying game (2004 edition) and has contributed to computer games from Sony Online, Origin, Interplay, and Looking Glass.
When I was 7, my dad let me stay up past my bedtime to watch Carl Sagan’s *Cosmos*. I didn’t understand all of what Sagan said, but I was deeply impressed by the realization that the universe, if anything, was huge and mysterious beyond my understanding. This impression was reinforced by an educational poster that hung in my childhood bedroom for years. It depicted, among other things, a map of the solar system, a calendar of the known lifespan of the universe, and a “powers of 10” sequence of 39 images that zoomed, in stages, from a carbon atom to an image of the entire known universe.

Yet, as a child of the *Star Wars* generation, I was raised on science-fiction as much as science fact. My imagination populated the cold, sterile universe depicted by that poster on my bedroom wall with exotic alien races and epic conflicts. I yearned to leave my humble planet and explore those timeless, endless worlds.

I’m still entranced by the thought of glorious exploration and dogfights among the stars, yet I look at the science-fiction games of today and I can’t help but feel saddened by the realization that in-game space flight is almost entirely absent. Instead, fast-paced shooting, roleplaying adventures and battlefield strategy are the order of the day. You’d think that travel and combat in the depths of space were no more alluring than the prospect of a coach seat on a flight across a few time zones.

It didn’t use to be like this.

**Elite Speaks**

In 1984, college undergrads Ian Bell and David Braben created a massive universe within a few dozen kilobytes of data orbiting the center of a single floppy disk. Their game was *Elite*, and for the space sim genre, it was the big-bang.

*Elite* put its players aboard a tiny spacecraft and launched them into something remarkable: a fully 3-D representation of vast, explorable space. Though capable only of wireframe graphics, its engine provided groundbreaking freedom of movement, and its eight separate galaxies contained more than 2,000 planets for players to visit. At the helm of the Cobra Mk III craft, the universe was the player’s oyster.
Elite’s initial release had no storyline or plot. The only explicit goal it presented was a gradual increase in ranking, from “Harmless” to “Elite,” earned by defeating hostile craft piloted by adversaries including aliens, pirates and bounty hunters. Success in battle depended upon purchasing equipment and weapons upgrades. In addition to space combat, Elite provided the enterprising space entrepreneur with a robust galactic trade market, each planet buying and selling commodities according to its population’s needs.

Elite’s massive universe predated modern “sandbox” game design by more than a decade and a half. Acclaimed by both critics and gamers, during the mid-1980s, it was ported from its original BBC Micro and Acorn versions to nearly every home computer on the market. It even made an appearance on the NES. In the years that followed, a number of unremarkable Elite-style clones tried to duplicate the game’s winning formula, but it wasn’t until the following decade that the space sim really came into its own.

Universal Appeal
The 1990s were the golden age of space simulation, owing in large part to the commercial successes of two major PC franchises: Wing Commander and the Star Wars: X-Wing series. Both focused on fast-paced outer-space dogfights, but they eschewed Elite’s focus on trade and exploration in favor of scripted, plot-based missions.

From 1990 until 1998, the Wing Commander titles captivated gamers with space-based combat and character-driven, interactive storytelling. The series’ fourth installment, released in 1995, purportedly had a budget of more than $10 million. The franchise eventually spawned an animated television series, a series of novels and even a major motion picture.

The Star Wars universe, on the other hand, had been a science-fiction mainstay for nearly two decades when Star Wars: X-Wing was released in 1993. Though not as personality-driven as the Wing Commander series, the X-Wing titles and their expansions, released up until 1999’s X-Wing Alliance, sold joysticks by the thousands.

Not all of the space sims of the era were strictly combat-oriented. In 1993 and 1995, David Braben and Frontier Developments released two Elite sequels that expanded the original game’s features, and in 1993, the Wing Commander universe produced a

The Wing Commander titles captivated gamers with space-based combat and character-driven, interactive storytelling.
popular Elite-inspired spin-off, Wing Commander: Privateer. Like Elite, both Privateer and 1996’s Privateer 2 focused on exploration, trade and travel, but they also continued the Wing Commander series’ emphasis on storytelling.

These games and their imitators put players at the controls of complex, capable spacecraft, and their zero-gravity skirmishes demanded far more finesse from players than previous action games. Maneuvering through space at blistering speeds took practice, and a flight sim joystick was usually a necessity. Weapons, shields, propulsion systems and wingmen often had to be managed in the midst of combat. Situational awareness was critical and usually augmented by on-screen radar and multiple camera views. In short, the genre had a substantial learning curve, but given the experiences its games offered, it was one many players were willing to overcome and eventually master.

For a few years, the space sim was a serious contender for PC owners’ time and money. But even as players explored and fought their way from one sector and star system to the next, a storm was brewing in the PC gaming market. It wouldn’t be long before space flight took a back seat to other diversions.

What Goes Up ...

id released Doom in 1993, catapulting the first-person shooter into the limelight. Real-time strategy games rose to prominence with Blizzard’s Warcraft in 1994, followed by the Command & Conquer series in 1995. Diablo hit in 1996. Bolstered by online play and advances in 3-D graphics, an unholy triumvirate of three-letter acronyms - FPS, RTS and RPG - rose to dominate the PC gaming market by the latter half of the decade. The last three years of the 1990s saw the release of appealing, addictive games, such as Starcraft, Warcraft III, Ultima Online, EverQuest, and Quake II and III. The space sim was in trouble.

Yet, in the midst of this changing gaming landscape, the space sim persisted. In 1998, Volition released Descent: Freespace and followed up with a sequel, Freespace II, in 1999. The Freespace titles featured streamlined interfaces and plenty of eye candy, including the spectacle of capital ships multiple kilometers in length. Both games were praised by critics, who heralded Freespace 2 as one of the greatest space sims ever created. Unfortunately, it didn’t sell well.

A similar fate befell the mission-based Independence War, released in 1997, and its more Elite-themed successor, 2001’s Independence War 2: Edge of Chaos. Each had a compelling storyline and characters, but the games’ realistic spaceflight physics and elegant but complicated interfaces proved to be major roadblocks for many players.

Over the past few years, only a smattering of space sim games has actually made it to store shelves, and of those, only a few have garnered any measure of attention. In 2001, Jumpgate delivered Elite-style gameplay in an MMOG setting, complete with RPG-style...
To Obscurity, And Beyond

“The space sim is dead” is a common refrain of late. Given the dearth of new titles and the apparently dwindling interest in the genre, it’s a reasonable assessment, at least for now. Ironically, many of the very attributes that initially made interstellar exploration and combat so attractive have proven to be the space sim’s undoing.

As mysterious and awe-inspiring as space may be, it tends to be populated primarily by variations of the same distant, detached scenery: flickering stars, looming planets, gossamer nebulae and the like. Even the most majestic depictions of space and its contents have been familiar takes on the same cold, unwelcoming theme. The universe of the space sim may be beautiful, but it’s not particularly varied or inviting.

Space’s size is also daunting, particularly when encountered in Elite-style games. When you’re attempting to find your way across something as huge as literally everything, complex star charts and tangled hyperspace routes make getting from point A to point B challenging. Add to this the perspective-less freedom of movement across the six axes space sims provide, and the universe suddenly seems like the empty, disorienting and unfriendly place that it actually is.

Joysticks have always been the space sims’ controllers of choice, but for gamers raised on gamepad and keyboard-and-mouse controls, they’re a bit of an anachronism. Most of today’s gamers probably don’t even own a joystick, and if they do, it’s likely been gathering dust since the last time they played X-Wing Alliance. The space sim’s persistent focus on ship micromanagement via keyboard controls hasn’t helped its popularity either. Constant attention to engines, shields, weapons systems, camera views, repair bots, radar modes, wingmate actions and more requires levels of patience and

Many of the very attributes that initially made interstellar exploration and combat so attractive have proven to be the space sim’s undoing.
attention that the majority of gamers no longer seem willing or able to muster.

There’s a clear trend in recent game design that focuses on stripping away complex, demanding elements that interfere with an immediately playable experience. Many space sim enthusiasts would argue that it’s these very elements that made the genre so unique and rewarding. Unfortunately for those who relish such depth, the space sim’s decline over the last several years arguably demonstrates that space simulations with flight-sim mechanics are destined to remain niche titles at best.

A cursory stroll around the internet reveals that the realistic space flight simulator game is alive and well, but not in any commercial sense. Instead, there are numerous and often vibrant communities dedicated to building and distributing new content from the ideas and code of previous titles. There are also a handful of admirably complex and beautiful freeware titles, like Noctis and Orbiter, which forego combat and trade to focus entirely on flight or exploration. None of these titles are making money, however.

**Back to the Future**

If there’s any hope for a large-scale, commercial revival of space exploration games, it will likely come at the expense of realism and complexity. And though longtime fans of the space sim may lament such a development, many gamers, including myself, would jump at the chance to explore the universe unfettered by cumbersome control schemes. I’ll admit it: Like most of the gaming populace, I’ve become numb to the novelty of complex realism, especially when it interferes with my ability to play and explore.

I’m heartened by the introduction of new controller designs, adopted thus far by Nintendo and Sony, that seem well-suited for free-form space flight. I’m intrigued by the graphical and processing capabilities of modern hardware that appears more than up to the challenges of rendering complex, beautiful universes with an epic sense of scale. And I’m fascinated by the possibilities provided by widespread connectivity across the internet - arguably a universe in itself.

If the popularity of games like the recent releases of the Grand Theft Auto and Elder Scrolls series is any indicator, players are still highly receptive to the idea of huge, explorable worlds. And although space flight itself may not immediately command a huge audience, science-fiction games in general are certainly alive and well.

For millions of gamers, outer-space still holds its mysterious appeal. So I’m not going to completely write off the space sim yet. I’m holding out hope that, one way or another, our games will take us back to the stars.

As a writer and editor for Gamers With Jobs, Adam LaMosca has at long last achieved complete self-actualization. He also maintains a personal website, Lowspec.com, just for fun.
I’m standing in vacuum atop a dead ravine, idly counting the delicate protrusions of ice that run along the opposite slope. This tiny world surrendered the last of its formative heat to the void eons ago, and the rocks that surround me have not shifted an inch in a billion years. The rapidity of my pulse seems a rude disruption of this most solemn and still of tombs.

But just a few minutes prior, I waded into azure pools beneath a cinnamon sky, while twin stars jostled for attention overhead. And before that, I jet-packed across teeming valleys, watching from high above as birds flitted among trees of crystal. And when I started playing *Noctis IV* about thirty minutes ago, the first world I set upon was racked by earthquakes and seas of lava, and a hostile atmosphere of pressurized acid sought entry through the joints of my space suit. Taken as a conglomerate, these myriad and disparate worlds are enough to make Rutger Hauer cry all over again; to make Keir Dullea turn away in astonishment and head for home.

*Noctis IV* is a freeware space simulator created by Alessandro (Alex) Ghignola. *Noctis*’ first iteration appeared in 1996, but Alex’s release of the game’s source code in 2003 has fueled a growing player base and an active mod community. *Noctis* shares little in common with most games, as there is almost no story of which to speak; no enemies, no levels and no end in sight. The player’s sole goal is to explore a galaxy of some 70 billion star systems, each with its own array of planets and moons. *Noctis* is a convincing and evocative mirror of a true-to-science galaxy and an ambitious distillation of our reality into an executable less than one megabyte in size. It is empirical enterprise given artistic form in a way that only the interactive medium of games can accommodate.

Each of *Noctis*’ worlds is geographically unique. They run the gamut from verdant paradises to blasted wastelands and range in size from gas giants to mere hunks of rock. *Noctis* exhibits a lifetime’s variety of terrain, and even a single planet’s conditions can differ drastically, depending on latitude. The only thing that all of *Noctis*’ variegated worlds have in common is an overwhelming and pervasive sense of loneliness. In this game, there are no living cities or...

---

And gazing on thee, sullen tree,
Sick for thy stubborn hardihood,
I seem to fail from out my blood
And grow incorporate into thee.

- Alfred Tennyson, *In Memoriam A.H.H.*
societies to be found; no friends to embrace, nor foes to thwart; no messages to receive or send; no voices to contrast with the endless vacuum.

There is an air of tragedy about Noctis — even (and especially) on the worlds with no atmosphere. There is something inexpressibly sad about an entire planet bereft of life, and in Noctis, even those planets that seethe with life lack the all-important characteristic of sentience. As I peer upon world after world from the narrow confines of my helmet, my natural excitement at gazing upon features that nobody has ever seen before is always muted by the knowledge that nobody ever will see them, except for me. Even considering all the other Noctis players out there, there is only a miniscule chance that any of them will ever stumble upon the same lonely corners of the universe as I. How wasteful it seems that so much should exist, and yet so precious few to experience it! What good is nigh-endless variety if there is nobody to catalogue it? What good is beauty if no one is around to appreciate it? The very concepts of “variety” and “beauty” are inextricably bound to the concept of the perceptive mind; in the absence of the latter, the former cannot persist.

Noctis, therefore, presents certain paradoxes. It is beautiful from the player’s perspective, but ultimately hollow from the player-character’s. Its worlds speak to the permanence of matter, but its sole sentient being is characterized by transience. To play Noctis is to be torn in every direction in a desperate attempt to reconcile these profound contrarieties.

As art, Noctis is heir to a history of ideas; it participates in and reflects upon a longstanding dialectic concerned with what place humans hold in the world, which has taken shape over centuries of human discourse. In order to understand the game’s full significance, we must provide a context to account for its role in that grand conversation. By placing Noctis within the context of history, we shall expose the role it plays in settling one of the greatest problems philosophy has ever produced. To do this — and since Noctis’ chief concern is with depicting the real universe in a believable fashion — we need to examine how our views of the universe itself (and our station therein) have changed over time.

Enlightenment, Romanticism and the March of History
Coincident with the emergence of the Enlightenment in 18th-century Europe was an unprecedented explosion in scientific progress. Having built rapidly upon the rudiments of natural philosophy, scientists presented for the first time a testable picture of how the universe functions. From Isaac Newton to Adam Smith, the trend across every intellectual sphere was to view the universe as a rational, deterministic system, circumscribed by inviolable rules. Humans, being a part of the universe like any other, were given the same treatment as everything else, and were asked to assume their proper role in a world described by reason.

But in the early decades of the 19th century, a vigorous countermovement to the Enlightenment arose, known as Romanticism. Romantics praised the human capacity for direct intuition of the facts of the world and reveled in intuitive - and even mystical - expressions of true ideas through poetry, art and other creative endeavors. They objected that there is no purely deterministic element at the core of human emotion; that there
By 1830, the battle for the future course of human thought began, with the combatants on both sides straining for all their worth. But neither could achieve any significant advantage over its opponent. In the end, they both fell to a third, outside participant who pulled the will propagate through the species, and which will die out. Science in the shadow of Darwin therefore became concerned not with prescribing rigid order to the universe, but rather with observing the intrinsically random behavior of natural systems. There is a principle of spontaneity at work in the universe, and Darwin touched his fingers to its pulse.

Darwin’s insights in the field of biology were soon followed by similar revolutions in the physical sciences. By the close of the 19th century, the illusion that science could present us with an infallible mirror-image of the real world had been thoroughly shattered — and science was stronger for the change. But the courses of science and art are wildly divergent; and whereas modern science must contradict the simple Enlightenment conception of the world, games like Noctis are free to embrace such notions and explore their consequences.

Noctis and Free Will
As people wrestled with Enlightenment and Romanticism, there lurked always beneath the surface a broader philosophical problem: the existence of free will. Darwin’s insights in the field of biology were soon followed by similar revolutions in the physical sciences. By the close of the 19th century, the illusion that science could present us with an infallible mirror-image of the real world had been thoroughly shattered — and science was stronger for the change. But the courses of science and art are wildly divergent; and whereas modern science must contradict the simple Enlightenment conception of the world, games like Noctis are free to embrace such notions and explore their consequences.

Noctis seems to come down in favor of hard determinism. Its galaxy is one in which planets ceaselessly orbit their parent stars; in which moons and rings revolve about their planets; dumb plants and animals grow and live without ambition; and rocks rest in total vacuum upon the edges of ravines, unmolested since the day of their formation. It is a galaxy very much like our own: vast, beautiful and almost totally devoid of consciousness (and therefore, free will). Noctis has no sentient life — the only exception being some extremely rare ruins of a forgotten civilization (of which the player is ostensibly the last known survivor). But these ruins are only the remnants of

As people wrestled with Enlightenment and Romanticism, there lurked always beneath the surface a broader philosophical problem: the existence of free will.

The theory of evolution did not originate with Darwin, but what distinguished him from earlier evolutionists, and what cemented his status as among the most important scientists ever to have lived, was his unflagging emphasis on blind chance as the significant motivator for evolutionary change. Although he couldn’t explain how organisms evolved, Darwin noted that when succeeding generations exhibit physical changes, no natural laws determine which changes advance by preexisting conditions? Many Enlightenment thinkers were given to the mechanistic view that, in principle, if we knew the position and momentum of every particle in the universe, we could then predict the course of future events, including the behavior of living beings. Romantics, on the other hand, refused to believe that all the complexities of human life could reduce down to determinism, and insisted that the human will is prone to spontaneity in a way that no data could ever predict.
buildings, and through their isolation only drive home the point that the galaxy is now empty of creative spirit.

The most ardent determinist could not have crafted a better exemplum of her theory than Noctis. Even the very worlds of Noctis — all trillion or so of them — are generated, not randomly or by design, but procedurally, in accord with rote mathematical algorithms.

**Sentience, Sanity and the Limits of Belief**

The allure of determinism is utterly intoxicating to the human mind. I feel its pull on chill autumn nights as I scan the wide heavens with binoculars and ponder my own insignificance. I can sense the imponderable engine of the universe, pounding away at its own pace. Thought and emotion slip away, and all that’s left of the world are objects in motion and objects at rest. For a time, I exist outside myself. I am Tennyson, gazing at the tree.

Any who have never experienced this mystical mode that I describe, need only play Noctis to feel it arrive in force. But it will only remain with you for a short time before fading away, leaving you to catch your breath. The thrill of the experience is like that of a rollercoaster: It is enjoyable precisely because it is terrifying, and we who partake of it must first overcome our better judgment otherwise. We harbor deep-set fears of our own mortality, transience and ultimate inconsequentiality, and sharp exposure to the Noctis’ determinism does nothing to assuage them. Indeed, for all the strength and perverse appeal of Noctis’ universe, we must, in the end, recoil from it even more forcefully and seek desperately to achieve terms of peace with a universe that seems unremittingly inclined to wage war upon human sanity.

Any world that operates without free will, and in which sentience loses its distinction from mere matter, is insane. We cannot contemplate it while retaining any kind of grip on our own minds. We cannot believe it without entering into an alien state of mind, and even when the hallucinogenic power of Noctis convinces us to believe in a determinist universe, we cannot sustain that belief for long before returning to our normal way of thinking. Determinism, in the long run, is untenable, and anything we cannot believe, in the long run, cannot possibly be true.

With each new planet, Noctis reinforces in the player’s mind just how small and fragile humans are. But the inevitable consequence of that realization is a newfound appreciation of how precious we are, too; how starkly and beautifully we contrast with the overwhelming majority of stuff in the universe. Noctis encapsulates nearly everything that exists, but what little it omits is the most important stuff of all. *COMMENTS*

Phillip Scuderi writes for Gamers With Jobs, and is currently pursuing a Ph.D. in philosophy at the University of South Florida. Beyond this, his loyalties remain uncertain.

**We harbor deep-set fears of our own mortality, transience and ultimate inconsequentiality, and sharp exposure to Noctis’ determinism does nothing to assuage them.**
Space, huh?

Space is pretty cool, I guess. Ships, you know. Guns and aliens and cargo smuggling and intergalactic rebellion and all that. Not a bad place for a game to take place. At least space is pretty easy to draw.

But you know, there’s an awful lot of it. People kind of forget that, I think. Games like X-Wing and Wing Commander and Galaga all take place in space, of course, but the, uh, size of it all, it just kind of gets lost amid the scrolling screens of enemies and gigantic battleships and Mark Hamill.

I try not to repeat myself too often, but today I’m going to tell you about another trend-setter that made its way onto the Macintosh long before anything like it was seen elsewhere. This one goes out to Escape Velocity, the only game I’ve ever played that made me begin to realize exactly how darn big space is.

To go back and play Escape Velocity, in any of its incarnations (vanilla EV, EV: Override and EV Nova, respectively), now is like playing interstellar Grand Theft Auto, but of course, simply calling it “Game X in space” doesn’t do it justice. I begin my space-faring career with a brand new shuttlecraft - the bottom of the totem pole - a handful of credits, and not a whole lot else. I am my own Han Solo; buying low, selling high, running errands when it pays (and mining asteroids when it doesn’t), running away from pirates when I’ve got cargo to deliver and sneaking by the local authorities when my cargo is less than legitimate. Space is huge in its infinite repetitive grid of black with a few stars scattered here and there in the background, and it’s doubly huge when I’m the smallest, most insignificant little blip on a radar screen that I could be. My life is subject to the whims of whatever ill-tempered battleships or unluckily-placed pirates that happen to be around, and if I’m playing on Strict Mode (no reloading saved games), that puts me in my place pretty quickly. I’ve had a few close calls, of course: There was this one hostile-looking Corvette a few hops away from Sol that had my name on one of its missiles ... but I digress.

The headiness of this sense of infinite space is virtually impossible to describe to the layman. It’s that moment where I look at my ever-expanding star map, which started out with maybe two or three star systems and grew to over 200, and I think, wow, this entire world lives and breathes on my computer. Discovering an alien race for the first time, stumbling across a new kind of ship design or watching a large CPU-controlled battle between two political factions; despite so many games taking place in space, not one has managed to replicate the sense of awe and amazement at space’s sheer size and
complexity. Screw the internet and virtual public space; Escape Velocity gives me more than enough frontier.

This is all how it feels until I can scrape up enough scrilla to put together a ship that’s big enough to boss other people around. Sure, I can pick fights with whoever I want; I can start my own pirate fleet and prey on the legitimate business-beings, and I can even carve out my own domain out of the star-map, if I’m big enough. But after a few big victories, my reputation will start to spread. Maybe I’ll catch the attention of a few well-connected people who could use my help. Some of them are Good Guys, and some are Bad Guys, but it’s very rarely that clear-cut.

Now, I have my own role in this intricate space opera; it is my ship and my abilities that dictate who wins what, whether planets are Rebels or Confederates or simply blasted to rubble, whether people live or die. I can exercise my agency on this world, leaving my mark on that which had, long ago, felt so incomprehensibly massive, so innumerable. I start to recognize certain people bouncing around the universe, and they - for better or for worse - have begun to recognize me. I have ascended the ranks; I’m rocking the hottest gear appropriate for my political affiliations; maybe I’ve got my own planet or seven. My Rebellion has won, with me at its head, and all the alien invasions have been successfully repelled. But you know, once you’re at the top, the only place to go is down.

So, maybe I’ll take a break for a while. Go outside, read a book, eat some ice cream. But the beauty of Escape Velocity is that I can always come back, start over in my shuttlecraft in some backwater nowhere in the Milky Way, and work my way back up from a small fry to a big fish. And maybe this time I want to be the good guy. Or the guy with the particle beam instead of the cloaking device. Or the one with the alien technology. This is open-ended gaming done right, and it’s up to me to decide what I want to be this time around. Perhaps I’ll decide that I don’t want to come back to this galaxy, and I’ll find another one instead - one inspired by Star Wars, or Gundam, or maybe just the product of someone else’s imagination. And if I’m feeling particularly inventive, I can - thanks to an easily expandable game design, plethora of fairly easy-to-use, code-free tools and a fairly strong modding community - tell my own story to others if I feel so inclined.

Escape Velocity is more than just set in space; it is in love with space. It’s not obsessing about cool ships and new weapons, or flying missions, or anything so gauche. It is the frontier vision we wish we had in our real lives, where we could leave everything behind and set out anew into a world far more expansive then we could ever hope to understand, and slowly we come to control it and make it ours, make it more our own space than our previous homes ever were, all by virtue of having shaped it however we see fit. And no matter how many times we conquer our new worlds, we will always search for more new frontiers to explore, and each time we will look at our expanding star maps and think, ”Wow.”

Space is big.

Pat Miller has been doing this for way too long.
Forgive us, Father, for we have sinned and written about EVE Online again, earning more accusations about illicit activities and shifty exchanges involving space bucks and haulers full of exotic dancers when our intentions are pure. Despite my hilarious antics crashing our first corporation into the metaphorical sun, every single one of us has returned to the game, and on any given night, you’ll find us shouting obscenities at each other on Teamspeak as we play Internet Spaceships. We talk about EVE because we, as a collective hive mind, feel CCP is one of the few companies that get it. We talk because we love too much.

But what is their secret to wowing a group of jaded gaming hobos? We have a theory. CCP is about as far from the norm as you can get, as it would be hard to find a point farther from the Los Angeles Gaming Industry Mothership than their headquarters in Reyjavik, Iceland. I put it to Magnus Bergsson, CCP’s Chief Marketing Officer: Does developing in a vacuum — far from the rest of the industry and its conventional wisdom — influence the way they design their games?

"Being stuck on an island in the middle of the Atlantic Ocean definitely carves deep markings into the way we approach game design," he responded. “CCP’s goal is to create games that are different, so I must say that being in Iceland is an advantage for us.” EVE definitely doesn’t bow to convention. Skills train over time, even while logged out, rather than on a per-fuzzy-animal-whacked basis. Instead of being locked into a specific role from character creation, players can learn any skill and fly any ship in the game, provided they are willing to spend the money and time to learn it. The majority of the game is free-fire PvP, and roving bands of pirates frequently penetrate into “safe” space to destroy the peaceful miners and haulers other games are built around.

He credits this approach for EVE’s rising subscription numbers, just about unheard of for a three-year-old game, saying, “The players have a much stronger sense of reward for their actions in EVE, as it is simply harder and more complex to [succeed] in EVE than in most other games. EVE is a game where the strong survive, and the players know it and value it. On top of that foundation is a game that is simply getting better with age and not the other way around. … [And] with more users, the game
simply gets more dynamic and fun.” Nightly numbers on the Tranquility server range from 17 to 20,000, with a current record of over 25,000 people playing at once.

Players coming from the “whack fuzzy animal, get better” world are often flabbergasted staring at the austere space station, wondering how to get better at the game without an experience system. The tutorial is rudimentary and covers maybe a 10th of the game itself. Have they ever considered making it easier? “We will never water down EVE simply to accommodate the new players, but we of course are trying to make it a bit easier for them. The first version of the new player experience was released in Exodus (EVE’s first expansion), and we have a team that is working on version two that will take that concept further. EVE was never supposed to be a six-million-subscriber game, and we are perfectly happy with how things are right now. Personally, I will choose a rapidly expanding core of loyal players rather than the more supermarket style of newbie churning.”

Those who venture beyond the station and the advancement model find a wide-open world awaiting them, one where they can blow up NPCs, try to become the richest miner in the universe or become a roving trader and builder. Or, given the game’s freedom, they can do all of that. One recurring theme in talking to Magnus and the rest of CCP is freedom. I asked why they push for openness when many developers build a world first, then try and cram players into the molds they’ve built.

How can you tell someone that he should start an alliance with 3,000 people and conquer the outer regions of space?

“How can you tell someone that he should start an alliance with 3,000 people and conquer the outer regions of space? Or that he should be the leading trader of [cruiser class ships]? Be a mercenary? Then, add that all together multiply that by about 120,000 times. It just doesn’t work. We can’t create heroes; only the player who has the passion and willpower to become a hero can do that. Whether he’s being his own hero or for everybody else in the universe doesn’t really matter, as long as he’s satisfied with what he’s achieving.”

I asked if they’ve found the holy grail of many MMOG developers: Player-created content, rather than developer-created content, using the guys at The Escapist’s triumphs, tragedies and successes as an example. “Absolutely. The players should be in charge of their destinies and the actions of the players should have a major impact on the game. That is our vision for gameplay and that is what we will continue to do.”
But a vision has to come from somewhere. I asked what some of the team’s influences were. "Ultima Online was certainly one of the most dominating factors, in addition to Elite. In fact, you could say that it started out as a mix of those two,” and the conversation wanders toward business, as we talk about the other games the CCP crew plays.

“We have people that play almost all of the big MMOGs, but I can’t really say that they have had a direct effect on EVE, since the setting and framework of MMOGs hasn’t really been a revolution, but more of an evolution.” There’s the all-but-obligatory tip of the hat. "This isn’t a bad thing -- we strongly believe in evolution and consider World of Warcraft as a prime example of how MMOGs have evolved into mass appeal.”

"The really revolutionary stuff is happening in the smaller games, which can allow themselves to experiment. Puzzle Pirates, Second Life, A Tale in the Desert, and, of course, Ryzom with their Ring are all good examples of how MMOGs have evolved into mass appeal.”

"It’s too early to tell,” he says, assessing the industry as a whole, "but these are certainly interesting times, and now is the opportunity to revolutionize the future of MMOGs. Fantasy games have established MMOGs in the minds of many gamers, but we’re nowhere done yet, and the Western market hasn’t come close to what’s happening in Asia. World of Warcraft is the first true global MMOG success, but they certainly won’t be the last.”

Defying just about everyone else in the Western MMOG space, CCP doesn’t rely on boxes for sales. There’s no wailing and gnashing of teeth about the death of retail from CCP’s end. "EVE was initially distributed in stores,” he says, referring to a launch-time partnership with Simon and Schuster’s game publishing division. However, "When CCP acquired the publishing rights back, we then decided that model was a dying one, and have stuck with a pure digital distribution strategy. Digital distribution allows us to be in control of our own destiny, much like the players in EVE, and that is what we value.” They also don’t charge for expansions, possibly the biggest cash cow for MMOG developers. This is because, he says, “We simply believe that charging for expansions and then for a subscription is double-charging the player, and therefore, we don’t feel we should charge for expansions.”

That’s not to say they’re sitting around flying their spaceships. CCP is actively working to expand. "We will be going directly after some new markets very shortly with localized versions of the game client, and the next one will be a German version,” Magnus says.

**World of Warcraft is the first true global MMOG success, but they certainly won’t be the last.**
After the demise of *Earth & Beyond*, *EVE* is the only large-scale, space-based MMOG of the market.

Following that will be other languages and linked marketing campaigns. “We will maintain our single-server design, as that was our vision and there is no reason to change from that.” With one exception: China. “China is a special case, due not only to rules and regulations but also internet connectivity issues.”

Existing *EVE* players will also find themselves drawn further into CCP’s web. They have plans for a handheld client for portable devices, so players can work the station markets from work, school or possibly the Moon (assuming they get reception). “It started as a test which grew into a much larger project when we realized the potential of it. Basically, we want to give players the ability to access their accounts remotely. You will, of course, not be doing any fleet battles on your mobile, but you can access skills, markets and other station services from your phone. This is, of course, the first version, and we will continue to expand on this in the future.” We also saw some artwork and cards for the upcoming *EVE* CCG, and they are absolutely beautiful, though combining the addictive potential of MMOGs and CCGs might be more of that Icelandic evil.

Shifting the conversation to the setting, I ask why they chose space. After the demise of *Earth & Beyond*, *EVE* is the only large-scale, space-based MMOG on the market. The answer is, partly, business. “Fantasy has in the past been the safe bet for game developers and, with the high cost of development of a new MMOG, this is where investors want to put their money,” Magnus says. “It is clearly much more challenging to create a sci-fi MMOG than a fantasy-based MMOG. Fantasy has been the traditional form for this genre and amazingly enough it continues to be so, even though sci-fi has been traditionally much more popular in other mediums.”

“*Earth and Beyond* wasn’t for everybody, and *EVE* certainly isn’t, either. There are upcoming space titles which are slated to be more mainstream and have more mass appeal and it will be interesting to see how they fare.”

In the end, though, it’s not all about *EVE*. “CCP has very ambitious plans for the future and, of course, we will not be a single game company. Still, we are dedicated to continue at full force developing for *EVE* and its brand name. It would be foolish for us not to use all the talent and experience we have gathered to create other games. That is about as much as I can say as I know my fellow CCP’ers will read this, and, I didn’t like the last tar and feather treatment I got!”

Shannon Drake likes commas and standing out in the rain.