I had had a really frustrating day. I had gotten nothing on my to-do list done at work, for all the small fires I was putting out; I needed to take my car to get inspected, as it was past due, but I couldn’t seem to find a slow day when I had time to do so; and I was greeted at home by my excitable white German Shepard, Daisy, whose head and front paw were poking through the now ripped screen of my second story apartment window. Further greeting was on the front door in the form of a note from my apartment complex manager suggesting I “take steps to remedy the situation” of my white terror barking and spazzing her way through the screen.

After dropping my bags, cursing the bad luck that this day - of all days - Daisy should behave such a way and building a massive barricade in front of the ruined window, I fired up *World of Warcraft* and found myself some nasty centaurs. And that night, I lost myself in “bonking things on the head” for a few hours, at the end of which, I wondered where my evening had gone, but boy, I felt better. I didn’t feel like I’d been just sitting still for a few hours, I felt like I’d taken out frustrations and anger. It was cathartic.

Another day, a lazy, cold, late fall weekend afternoon, my significant other and I were itching for something to do, but didn’t want to have to be out and about in the cold. We decided to run to the game store and pick up a copy of a game getting some good buzz. We popped the game into the PS2, ran through the quick tutorial and jumped into the chilly, suspense-adventure of *Indigo Prophecy*.

Several hours later, we looked up from the floor, where we were huddled under blankets in the pitch black of my apartment, and stretched our stiff limbs, as we’d hardly moved for hours. It was no colder in my apartment than it had been earlier in the day, when we sat reading without blankets. But now the blanket was a necessity, both because of the odd chill we had and for protection from … well … just the creeps after playing the game.

These two experiences were quite different in purpose, feeling and actual gameplay, but ultimately they resulted in the same thing: immersion. Slippery thing, immersion. It’s the holy grail of many game designers, creating a game that will immerse players in a world, event or story.

But what is it, really? We can put a neat little definition on it, but it gets us no closer to achieving it. We can point at things that have encouraged immersion in the past, but there’s no guarantee it will work again. We can try to make a game that’s pinnacle of immersive to all people at all times, but there’s really no such thing.

Why?

Immersion is as much about the person experiencing as it is about the experience. Had I brought home *Indigo Prophecy* on *The Day Daisy Almost Jumped Out the Window*, I likely would have missed some of the subtle nuances in the game design. And had my significant other and I sat down to *Bonk Things on the Head* in *World of Warcraft* on that cold autumn day, it would likely have felt more like grinding levels.

Some of the responsibility for immersion falls on us, as players. If we’re not willing to suspend disbelief, if we’re hoping to get deeply involved in a game, but give it only 45 minutes of play, we won’t get too far. And it’s this most slippery of subjects that is the topic, once again, of this week’s issue of *The Escapist*, “Can’t Get It Out of My Head.” This week, our authors write about their own immersive experiences, those who create immersive experiences and try to nail down that special Something that creates immersion. Enjoy!

Cheers,

Julianne Greer

**LETTERS TO THE EDITOR**

In response to “Free Fall” from *The Escapist Forum*: Good to see Armadillo Run getting more exposure - this is probably the most fun I’ve had with a game for the last five years. A perfect example of less is more in game design.

Oh and reading your discussion of Croquet is a great example of another feature I liked about the game: you don’t have to produce mechanically
ingenious solutions. You can also sidestep the "intended" solutions with a bit of lateral thinking in many cases. **[SPOILER WARNING]** Instead of trying to build a better mallet, use a cheap, rubbishy mallet and build a support to stop the anvil from falling so quickly. Croquet? No. A win? Yes!

- Dom Camus

In response to “Free Fall” from The Escapist Forum: Armadillo Run is definitely a great game. I wish I could say the same about the article. I can’t help but wonder how in 5 pages of text, neither the developer nor the writer saw fit to point out that AR is a much-improved revisit/remake of the quite popular and famous Bridge Builder, which amongst other things won the audience award at IGF2003. It’s had several sequels, including the 100% free, minimal “Bridge Building Game” from the original author.

While AR certainly made vast improvements to both the interface/useability, range of building materials, aesthetic, etc. the article seems to suggest that the game idea itself is original, when it’s quite simply not. BB features all of the basic mechanics found in AR, the similarities are far too striking to be accidental, and frankly it saddens me when such a great, literate magazine fails to do at least a cursory amount of research before heralding a game as a great innovation. A great game it may be, but it is a game whose greatness lies in its refinement, improvement, and advancement of a concept introduced by others. The choice of introductory quote was much more apt than perhaps intended.

Not to mention, both games owe a debt to the various “The Incredible Machine” games, as a previous poster mentioned.

If you were writing an article introducing Duke Nukem 3D, it would be irresponsible if you failed to mention Wolfenstein or Doom, wouldn’t it? And yet this is exactly what you’ve done by omitting any reference to TIM or BB, respectively.

- raigan

In response to “Chaos” from The Escapist Forum: Hey. It’s fun to see Chaos getting some recognition. I discovered this game pretty late and I’ve only played it on an emulator. At a glance it looks pretty weird by today’s standards, but I managed to get really into it and I was amazed about just how deep the gameplay is.
I'm a graduated game programmer and I used Chaos as basis for my finals project, which was a game I developed by myself called "Chaos Reborn". I took what was basically Chaos, and added my own ideas into the mix.

It's just a silly student project. The graphics are pretty crappy and I didn't have time to implement some of the more fun aspects of Chaos like mounting creatures or the blob, but I like to think it's a really fun casual game you can play in short bursts.

This game gave me a nomination for best game idea at the Swedish Game Awards '05, which honestly was kind of embarassing considering it wasn't really my idea to begin with.

- Scarabus1

In response to “Jumpgate” from The Escapist Daily: Hello,

I was reading your coverage of the EVE Developer Misconduct story and I wanted to comment briefly on some of your coverage. First off, I'd like to say that it is refreshing to see an article that approaches this topic from a true journalistic perspective. Many sites, including Slashdot, have simply repeated sensationalist opinions on the events that have transpired. Joe Blancato did an outstanding job of approaching the topic from an unbiased position.

I do, however, think that his sources may have provided him with a perception of the event that is not complete. I've been playing EVE for the last 4 years (since its release) and I've been a member of both GoonSwarm (I know Remedial and have met him) and Band of Brothers.

There is a lot of resentment between these two organizations. I would suggest contacting either Sir Molle or Blacklight (both executives within Band of Brothers) to get their side of the story, because many of GoonSwarm's accusations imply that they knowingly abused game mechanics (a bannable offense). I think an interview with one of them would provide the balance that a situation like this calls for.

Regardless, your coverage has been far above average.

Sincerely,

Justin Appler

Hi Justin,

Thank you for the compliments. I just wanted to let you know we did in fact contact BoB for their input, but they responded:

"CCP's official announcement can be found on the Eve Online forums. We have no interest in expanding on that."

I've updated the main article, as well as the interview with Remedial to reflect the new info.

Yours,

Joe

In response to “Dichotomy of Anonymity” from The Escapist Daily: Personally, I have had a tough time listening to what people say about gamers. My most frustrating moment came a few months ago, watching the Video Game Awards on Spike. I have never seen something so off the point. Did spike really believe that gamers would like watching a parade of hot celebrities making fun of gamers, calling them "15 year old virgins" over and over again? Was I supposed to be happy to see a beautiful woman bash my interests, during a program that was designed for my viewing pleasure no less?

I take comedy with good humor most of the time. If it's not video games that I'm thinking about during my free time, its stand up comedy. There is a line, however. Self-effacing humor is funny when it is SELF-effacing.

You have here a situation where gamers are being generalized as sexually under-developed and under-experienced children. So then, why am I attracted to female gamers? Well, it's nice when you meet someone that won't bash something you love doing. It's nice when you have a relationship with someone that doesn't belittle your interests. A lot of non-gamer women, and even casual game-playing males, find devotion and love of gaming to be 'silly'. I just want to be with someone that won't ridicule something I find so much joy in doing.

- Blaxton
It seems a mystery that a problematic game like Final Fantasy VII could be so, well, unforgettable. Its villain was even worse than cliché, its translated dialog conjured images of poorly dubbed Godzilla movies, its blocky graphics reminded me of children's artwork, and its love triangle came straight from that novel the 15-year-old captain of the chess club hides in his violin case. So why do industry experts consistently cite this game as a "defining moment for our industry"? Critics are at a loss to explain its massive success. One blogger, desperately trying to explain this, said - I swear I'm not making this up - the masses of Final Fantasy VII fans were all part of a group delusion caused by the shock of seeing the first CGI graphics integrated into a large RPG world; all else was just nostalgic fondness.

Perhaps it's time to learn the true lesson of Final Fantasy VII: Even a mediocre game can be made great through incredible "Emotioneering."

**Diamond Characters**

Coined by David Freeman in his book *Creating Emotion in Games*, Emotioneering is "the vast body of techniques that can create, for a player ... [a] depth of emotions ... [or immersion] in a world or a role." Freeman, a successful TV writer, found it intriguing to bring evocative techniques to gaming. Freeman believes we will create "the next revolution" in electronic entertainment by bringing emotional impact to the medium. He may just have a point, as the success of Final Fantasy VII proves.

From the moment the first cut scene plays, we're immediately assaulted with Emotioneering techniques. A beautiful and mysterious flower-girl walks the streets of the grotesquely industrialized city of Midgar. We're intrigued and pulled in by the girl. Who is she? The mystery motivates us to keep playing. Freeman calls mysteries a "motivation technique." The visual incongruence of the fantastical city pulls us out of our reality and into that of the game's in an emotionally resonant way. Visual incongruence is a "world induction technique," because it pulls the player into the fantasy world.

Moments later, the main character, Cloud, nimbly leaps from a train and prepares for combat. By the cut scene's end, we already know Cloud is an athletic action hero looking for a fight. Cliché? Just keep playing; a cliché Cloud is not. Though, on the surface, he's a stereotypical action hero that only cares about himself, before long we'll see that it's all just a façade meant to conceal his fear of failure. Cloud has what Freeman calls a "character diamond" - a diamond has four points, just as a nuanced character has at least four defining
characteristics. Cloud’s character
diamond might look like this:

Action hero: He leaps dramatically from
trains and looks great on a motorcycle.
Oh yeah, and the size of his sword rivals
only the size of the spikes in his hair.

Distant and uncaring: He’s just here to
do a job and get paid. Save the planet
from Shinra Corporation? Who cares!

Born Loser: Cloud does everything
wrong. He loses the girl – two actually –
and hands over the means of destroying
the world to his archenemy. His
companion must save the world because
he can’t. He’s having a bad life.

Split Personality: He hears a voice in his
head because he’s buried his real
personality so deeply that he’s started
thinking he’s someone else.

Any two of these and Cloud risks being a
walking cliché. All four and Cloud
becomes interesting. We later discover
that Cloud’s seemingly contradictory
traits are caused by deep emotional pain
from his past, adding real depth to the
character. The designers have effectively
used Freeman’s “character deepening
techniques” and “character interesting
techniques” (so called because they, uh,
make the character interesting).

The other two main characters are Tifa
and Aeris. Tifa is the shy, yet popular
and gorgeous (of course) girl that Cloud
pined over while growing up. Aeris is the
mysterious flower-girl from the opening
scene. The trio develops over the course
of the game, and we can’t help but
emotionally empathize with their
predicaments and pain. As we empathize,
they become “real” to us. Every moment,
our emotional connection to the
characters grows, thanks to liberal use of
dialog, cut scenes and in-game events.

For example, at one point the captured
main characters wake up in a prison.
Because of the thin walls, Aeris hears
Cloud in the next cell but is unaware that
Tifa is there as well.

This is their dialog:

\[ \text{Aeris: } \text{I knew that Cloud would come for me.} \]
\[ \text{Cloud: } \text{Hey, I’m your bodyguard, right?} \]
\[ \text{Aeris: } \text{The deal [for you being my bodyguard] was for one date, right?} \]
\[ \text{(Tifa sits up.)} \]

\[ \text{Tifa: } \text{...oh, I get it.} \]
\[ \text{Aeris: } \text{...! Tifa! Tifa, you’re there too!} \]

In just 29 words of dialog, the designers
have exposed us to the trio’s character
diamonds, while simultaneously
establishing tumultuous and conflicting
feelings between them: Aeris’ flirtatious
nature, Tifa shyly changing subjects and
Aeris quickly redirecting her attention to
Tifa. Freeman would call the realistic layer
of feelings between Tifa and Aeris, close
friends fighting over the same man, an
example of “NPC to NPC chemistry” and
“relationship deepening techniques.”

Square also encouraged the young male
demographic to identify with Cloud
because two women admire him.
Freeman calls this a “role induction
technique.” Yet, the positive feelings of
having two women admire Cloud are
offset by the knowledge that someone
must eventually get hurt. Freeman calls
this an “emotionally complex situation.”
Final Fantasy VII uses Freeman’s
techniques so frequently, we ride an
emotional roller coaster over the main
characters’ plight.

The Death of Aeris – A Watershed
Moment

“Every moment, our EMOTIONAL
CONNECTION to the
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OF DIALOG, cut
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KEYNOTES ANNOUNCED!

“Game 3.0: Developing and Creating for the Third Age of Video Games”
Phil Harrison, Sony

“A Creative Vision”
Shigeru Miyamoto, Nintendo

March 5-9, 2007
San Francisco

Take Control
Moscone Center
www.gdconf.com
Sadly, the game’s oedipal-complex-ridden villain, Sephiroth, grasps desperately for characterization before coming up wanting. He has no character diamond; his motivations remain virtually indecipherable to the very end. As far as I can tell, he goes on a killing spree because (I’m not kidding you) he finds out his mother is a headless monster that fell from space. The game designers, sensing Sephiroth’s shortage of character, gave him a 20-foot long sword to compensate.

And yet gamers revere Sephiroth as one of the greatest videogame villains of all time. Sephiroth actually deserves his infamous spot in videogame history, because he’s the only villain to ever kill a beloved and fully developed character – Aeris. In this one act, Sephiroth becomes the proof in Emotioneering’s pudding.

Aeris’ death became a watershed moment in videogame history, raising the level of FF VII to art. This “plot deepening technique” literally moved people to tears.

Later on, the death of Aeris is repeated via a flashback. But the second time, it’s given a different meaning. Initially, Aeris’ death marks Cloud’s ultimate failure to protect a loved one, causing him to lose hope and eventually plunging him into a downward spiral. But when it’s discovered that Aeris died saving the planet, the very same disaster becomes symbolic of the rebirth of hope and obtaining victory from failure – the story’s reoccurring theme. Freeman calls this technique “enhancing emotional depth through symbols.”

Where is Our Shakespeare?

Centuries after Shakespeare’s death, he has become immortal through his works. The great writers of our day still look to him for inspiration. Copying his genius too closely is the definition of “cliché.” Is Final Fantasy VII our industry’s equivalent to Macbeth?

Roger Ebert once gave his opinion that videogames are not art. Though Ebert has no experience with videogames, he pointed out that “to [his] knowledge, no one in or out of the field has ever been able to cite a game worthy of comparison with the great dramatists, poets, filmmakers, novelists and composers.” On this point I believe he is correct. Our infant – no, embryonic - medium has yet to have its Shakespeare. Though the future Hamlets and Macbeths of electronic entertainment are yet to be, I wonder if Emotioneering, when skillfully utilized as in Final Fantasy VII, points the way.

Did players cry over the death of Aeris because they lost their best magic casting unit? Do fans fantasize about a “might have been” romance between Aeris and Cloud because the graphics in the game blew them away? I suspect not. Without its incredible Emotioneering, Final Fantasy VII would have slipped into obscurity - just another box passing through its two-week shelf life in Gamestop. FF VII used a worn out bag of tricks, but succeeded because of its strong emotional content. Little wonder there are so many web shrines built to Aeris, Cloud and Tifa but none to Prince Rurik of Guild Wars.

Bruce Nielsen’s short experience as a game producer left him cold and he’d rather be a game consumer anyhow. If you’re stupid enough to want to hire him anyhow, please offer a very large salary. He can be reached via The Online Roleplayer, which he runs.

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It’s tense frustration, really; at best, anxiety. The feeling is familiar to most people who have played a single-player computer RPG recently. Leading your party down a dark and mysterious cavern, your finger is poised over F2 or F5 or whatever button quicksaves. Every so often, you tap the button, watch a progress bar move, the action pauses for a moment, and then you get back to the tunnel. Suddenly, a spike thrusts up from the floor. Your wizard is dead. So it’s F3 or F7, a longer pause - “LOADING” emblazoned on the screen - a hang in the music, and then the wizard’s alive again, a few feet farther back. Perhaps you’re wondering how your versions of the indomitable Conan, Gandalf and Robin of Locksley started dying faster than Dirk the Daring. More likely, though, you’re just muttering about why developers can’t find a way to speed up quickloading. It’s supposed to be quick, after all.

The Problem
Consider the following pieces of sage advice. IGN.com warns Oblivion players: “You’ll want to save a lot ... since things can quickly go wrong. The game occasionally autosaves, but you’ll need to stay conscious to save as often as possible.” UHS’s fourth general hint for Baldur’s Gate II cries, “SAVE OFTEN! You’ll probably die quite a bit.” The definitive BGII walkthrough on GameFAQs elaborates that there are three times the player should save: when you win a battle, when you rest and “everywhere else.” After all, “you never know when you will go to a new area, have your best warrior charmed, and have half your party killed.” To be safe, use 10 save slots! The same warnings abound for Fallout 1 and 2, or for any other contemporary Western cRPG.

This “hardcore” aspect of Western RPGs is often treated as a badge of honor, as though the frequency of death is equated with challenge. Games with low death rates coddle the player; they invite “newbies” and “idiots” and “crybabies” whose presence in the target demographic will surely lead to a dumbing down of the game’s story and gameplay. Killing the player ensures consequences for failure; it adds tension; it ensures that combat does not become the sort of mindless grind endemic to Japanese RPGs and MMOGs. Or so the theory goes.
In fact, this theory doesn’t hold water. When the only consequence of failure is death, and death is instantly undone by loading a saved game, failure becomes nothing more than a minor, meaningless inconvenience.

“Death is Different”

Outside of computer games, it is usually taken for granted that death is the ultimate sanction. In the beginning, RPGs took this lesson to heart: For pen and paper (P&P) games, death was rare and seldom “true” (raising or resurrection was usually just around the corner), and penalties more often took the form of attribute reductions, broken items, curses and the like. This is still true for P&P games today; the 3.5 Edition of the Dungeons & Dragons DM Manual describes the death of the entire party as “rare” and notes that it should be used to create new gameplay opportunities, such as having a band of NPCs revive the party and place the heroes in their debt, or letting the players roll temporary characters to retrieve their principal team’s bodies for resurrection. Only in the extremely rare case should the PCs’ adventure end for good.

A good DM would usually find a way to penalize a player for his failure without killing him; after all, killing too many characters often left a DM without anyone to play with. So, when Eric the Brave failed at his roll to jump across a chasm, usually he would end up with broken legs (how will we get him out?) or trapped in a scorpion den (can he fend them off until rescued?) or something of the sort.

This fits with the pulp adventure stories that RPGs were trying to replicate. Heroes almost never die in fantasy stories, especially not in mundane circumstances. Failure and setbacks are common, but they lead to exciting new situations, not the story’s end. Indiana Jones doesn’t die when he misses a jump; he scrambles against the pit’s edge and pulls himself up by a vine, in a movie-defining scene.

This perspective of death as a storytelling tool did not make it into early videogames. Story was irrelevant to Pong and Space Invaders; lives were tokens, and running out of them set the player back to the start and reset his score. It is no surprise that the earliest cRPGs - games like dnd and dungeon - derived their gameplay from arcade contemporaries even while taking their names and settings from their P&P forebears. These games were about finishing levels or racking up a high score; it only made sense, then, that the player should die often, as he did in other electronic games, and that he should start over when that happened.

As cRPGs moved from obstacle-filled mazes to, well, more complicated obstacle-filled mazes, players began to become as interested in what came next as what was happening now. Ultima IV and Wasteland tried to bring a world to life and introduced a range of setbacks for players, such as losing virtue, acquiring an STD or having a party member die. Since both games limited how saves worked (both in where you could save and in how many saves you could keep), players were expected to play through such losses, and they usually did. Perhaps unsurprisingly, in Ultima IV, which pushed story especially to the fore, death was transitory: The player was immediately revived (back at the start of the game, reflecting the lingering “restart at death” model), though he lost reagents and gold. The designers realized that the more the

Indiana Jones DOESN’T DIE when he misses a jump; he scrambles against the pit’s edge and PULLS HIMSELF UP by a vine, in a movie-defining scene.
player cared about his characters, the less justifiable killing them would be. Nevertheless, most RPGs (AD&D “Goldbox” games, Might & Magic, Wizardry, etc.) continued to use death as the primary penalty.

Save Yourself!
As stories became more complex, it became increasingly difficult to kill off party members (who were now characters, not merely faceless soldiers) or to justify automatic resurrection. At the same time, players became less tolerant of replaying the same areas over and over again, especially when those areas were mazes they had already solved filled with obstacles they had already overcome. Suddenly, none of the classic approaches to death and resurrection were viable.

Designers were faced with a twofold challenge. First, they had to fit player failure into increasingly complex, fixed stories. The solution was to make failure independent of the story - you could die as often as you liked. The second problem was figuring out how to penalize failure without requiring the player to replay substantial areas. Around the same time, LucasArts, faced with a similar conundrum in the adventure game genre, removed death entirely. But RPG designers could not give up killing the player, in part because cheating death is such an integral part of fantasy stories. Instead, they relied on saving. If the player saved his game regularly, death would not force him to replay much. And if death ended the game, failure didn’t cause any story problems because restoring a saved game “undid” the death and reset the story.

The problem is, this approach made a shambles of a game’s narrative, as the flow was routinely interrupted with loading and saving screens, and the hero went from Indiana Jones gumption to Pitfall Harry fragility. Even worse was what saving did to game difficulty.

Instant Replay
The more often the game killed the player, the more often a savvy player would save. If a dungeon had deathtraps in every hall, the player would save at every corner. If a critical hit from an average foe could kill the hero, the player would save before every battle - after every round, if the game let him! While console games rely on “save points,” these are indefensibly restrictive on computers, especially when a player wants to quit and end his session.

Saving and killing form a vicious cycle. The more the player saves, the more reasonable it seems to kill him. Small wonder that RPGs introduced a “quicksave” button to minimize the player’s hassle. Smaller wonder still that the games have added the suggestion “Quicksave often - you could die at any time!” Can you imagine a sports game warning, “Quicksave often -- the opponent might score!” or a strategy game suggesting, “Save before and after every battle to make sure your army never suffers defeat!”

Death, which began as the ultimate, game-ending penalty, is now nothing more than a hassle that lasts only as long as a game’s loading time. Meanwhile, because players keep a book of dozens of saves for even a single dungeon, lesser penalties - such as injuries or broken items - are quickloaded away just as deaths are. The save-load mentality dictates that punishments are transitory, not lasting. As a result, few RPGs today would ever dream of permanently lowering a character’s strength or taking two levels.
from him, as older games often did. Why bother, anyway, when it will be quickloaded away?

It’s no longer possible to play “hardcore” - without frequent saving and loading - even if you wanted to. Because designers build their games around the “average” player, they will include random deathtraps or high critical hits or overpowered charm spells with the expectation that the player will save to avoid them. Likewise, later encounters will be structured with the expectation of successfully overcoming earlier ones, because players will replay until they emerge unscathed. The cascade effect from not reloading early on can therefore be crippling down the line. This is especially true of NPC interactions, where it is often critically important to pick the “best” route to unlock quests later in the game or obtain status increases necessary for subsequent battles. Ultimately, even a “hardcore” player can swiftly become habituated to quicksaving. Perversely, then, the higher the likelihood of death, the lower the tension, because the player will increase his save frequency to compensate for more deaths and will thus have less at stake when his player is in harm’s way. Once you’re in the coils of the save-kill cycle, there is a total absence of dramatic or even situational tension. In its place is rather unpleasant anxiety. Absent, too, are consequences for the character, who never suffers anything that is not immediately undone. What remains is merely the fear of loading delays, under which only the player suffers.

Breaking the Cycle

Lamentably, the only escape designers seem to see is imitation of console RPG sensibility: namely, sharply reducing the difficulty of combat except against “bosses.” This “solution” solves nothing; doing away with non-consequential failure by removing failure itself is like cutting off your nose to get rid of a pimple. Removing failure not only takes most of the fun out of success, it takes out the fun of failure itself. As researchers like Niklas Rajava explained in a paper two years ago, players can enjoy losing almost as much as they enjoy winning, under the right circumstances. Rajava found that interactive failure (where failure led to continued gameplay) was pleasurable, while passive failure (where failure was outside player control or ended his play) was unpleasant.

The better solution, then, is to return death to its rightful place as an infrequent punishment and to reintroduce the host of other sanctions once familiar to roleplayers. Indeed, the unglamorous Rogue-like subgenre of cRPGs, although featuring frequent deaths, includes a wide array of non-lethal punishments, ranging from destroyed items to mutations. The fun of Rogue-likes is recovering from these setbacks and - as the D&D manual suggests - finding the gameplay opportunities within them.

Promising independent RPGs, such as Mount & Blade and Age of Decadence, are making significant steps in this direction. Losing in battle means being robbed or perhaps taken captive, but does not end the game.

Here are five basic principles to help fix the save-load dilemma:

1. The player should never be expected to save except when ending his play session.
2. The player should receive significant long-lasting penalties much more frequently than he should die. Small permanent penalties should be frequent and essentially unavoidable (but seldom imposed due to pure chance), to accustom the player to weathering setbacks rather than undoing them.

3. The player should never die (or receive another substantial penalty) for anything other than an elected risk. That means it should be possible for a player to see when he is getting in over his head, there should almost always be a way to get out of a potentially deadly situation, and random chance should have little influence in dying.

4. Accordingly, it should be possible for combat to end some way other than every enemy or every party member dying. Retreat should be reintroduced as a viable strategic option with more upside than reloading. Furthermore, the player (and the enemy) should be able to negotiate or surrender when doing so is plausible.

5. Failure should create possibilities rather than merely foreclose them.

Implementing these suggestions is, of course, vastly more difficult than merely declaring them. After all, it has taken Rogue-like games decades to achieve their present complexity. But as sandbox games like Grand Theft Auto and The Sims thrive, and mainstream RPGs like Bioware’s promise increasingly responsive environments, rethinking the save-kill paradigm not only makes sense in terms of story and gameplay, it also serves the bottom line. For perhaps the first time ever, RPGs have the technology, budgets and experienced designers capable of capturing the thrill, adventure, setbacks and reversals of classic fantasy stories. That is the fun of fantasy. Carpe diem. After all, no one ever dreamed of quicksaving.

Marty O’Hale has written stories for a number of computer and videogames, primarily roleplaying and strategy games. He has also published a number of works of fiction. Currently, Marty’s career is in the law.
POLITICIANS CONSIDER VIDEO GAMES TO BE AS DANGEROUS AS GUNS AND NARCOTICS. AND THEY’RE SPENDING $90 MILLION TO PROVE IT.

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One thing you must remember above all things is this: *Uplink* doesn’t smile. It doesn’t smirk about how clever we are for acknowledging we’re playing a videogame, and it doesn’t get so involved with itself that it seems hilariously serious. *Uplink* is a simple Windows application that runs like any other, casually pretending to download a program that makes it possible to hack the planet. It’s got the simple but effective interface a hacker would make for himself, not the flashing whiz-banging electronic geegaws of a videogame. The only acknowledgement to fiction *Uplink* makes is the date at the top of its stark main screen: 2010. Even then, I unplugged my ethernet cable, just in case I really was bouncing signals off open servers while investigative hounds chased me across the electronic moors of the internet.

Introversion hacked its way into my life, and my heart, with *Uplink* and returned to my attention with the world-ender *DEFCON* (*Darwinia* was enjoyable, but not quite my thing). *DEFCON*, like *Uplink*, is an unsmiling game, though *DEFCON* is less about hacking and more about destroying the planet. Players hunch over a retro ‘80s display screen depicting missile bases, fleets, submarines, airfields and cities, and hurl nuclear death at each other. *DEFCON* reports the body count/score with all the cool detachment a computer can muster. 1 million killed. 2.5 million killed. 10 million killed. The punch doesn’t come through the graphics or writing — no CGI cutscenes of mothers clutching children as they are immolated by fire — but through that same clinical detachment. 10 million just died a horrible, flame-drenched, screaming death, all because you forgot to put up a missile base to defend the Pacific Northwest. Thanks for playing.

The common thread in the two games is that simple but enthralling feel. *Uplink* doesn’t go overboard with flashing graphics and sirens when the electronic Javerts begin their pursuit. Terror comes in a beep, like the motion trackers in *Aliens*. I’m in. Beep. Now, where do they keep those files? Beep. Beep. Just a little more looking. As they get closer, the tracker speeds up. Beep. Beep. Beep. Time to pull the plug and cover my tracks. Beepbeepbeepbeepbeep! I’ve faced down the hordes of Hell itself, battled through games written by horror masters, but nothing made ice-cold fear wash down my spine like the frantic
beeping of the tracker as my hack went awry, to the point that I reached around my computer case to make doubly sure I’d unplugged my network cable.

DEFCON also uses subtle touches to draw you into the world of annihilating humanity. The cool, detached display and simple icons wouldn’t impress the “Real is Brown” crowd, but it wouldn’t be out of place in a quiet Air Force bunker in North Dakota. The interface is simple and utilitarian, all about conveying information — as one imagines a military computer might — rather than impressing with graphical wizardry. The soundtrack is haunting ambient music, making it easy to sink into. And it’s embedded with little audio bits to enhance the mood: A child’s laughter echoes from far away, someone — perhaps the other fellow with a launch key — coughs and clears his throat. After finishing an office LAN game, one of my coworkers blurted, “God, I hope we didn’t really nuke a bunch of people.” Silly as it is, we all shuffled to the window to make sure mushroom clouds weren’t blossoming over downtown Raleigh. Yes, we checked.

Impressed by a game capable of making hard-bitten cynics paranoid, I tracked down Chris Delay, Creative Director and lead developer at Introversion. I wanted to talk about their unique take on gaming and game design. He spends his workday “think[ing] up new game ideas and develop[ing] them into something we can sell,” which led to a discussion about DEFCON’s development.

Look at DEFCON, and the influence from WarGames is clear, so it wasn’t too surprising to find out the movie was the initial inspiration for the game. “It was one of those films that I really loved as a child,” Chris said. “That, and Tron, which probably explains quite a lot! Uplink, our first title, was also inspired by WarGames, with the hacking elements, but it wasn’t until some months later when I was watching the film again that I realized there was another great idea for a game about thermonuclear war that, to my knowledge, had never been done before.” This game wasn’t going to be a heavy simulation, he said. “We wanted to make a game that was less heavily strategic and quite stylized, like the movie, so you’d see vector-lined Soviet subs closing in on your coastlines and things like that. As usual, we like to create a lot of atmosphere in our games, so recapturing that Cold War sense of paranoia and tension was also crucial.”

I told him my Uplink Ethernet story and asked if there was a reason they put so much effort into immersion. “Yes, absolutely, the immersive nature of games is really important. It’s what hopefully keeps you coming back to play them again and again.” He added that Introversion has no “delusions of grandeur,” no illusion that it can compete with the bigger game companies with hundreds of developers working to make games incredibly realistic. Chris says Introversion has to “try and turn our

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potential weaknesses into pluses, so, although we aren’t able to follow in the bigger companies’ footsteps, we can experiment with off-the-wall concepts, which they might not be able to go near, and concentrate on manipulating the gamer’s environment to make everything in-game seem more real. We put a lot of effort into elements like the soundtrack, to try and enhance the mood.”

He uses DEFCON as one of his examples, where they put in “this really melancholic string adagio which gets progressively slower and sadder as you start to lose. It’s almost imperceptible, as is the gradual fade in color saturation as the game progresses, but it gives a real sense of foreboding and impending doom!” Uplink’s beeping was also crucial, he says, in “creating a sense of tension. As you progress in a hacking mission, the countdown beeps get faster and faster, making it very difficult not to panic in the final stages. The fact that there is no in-game save option in Uplink also heightens the suspense; you have a lot to lose if you fail the mission. Sometimes, it’s the simpler, perhaps even cruder, elements of a game design that really make the difference and fool you into thinking it’s real.”

I asked him if that was part of the Introversion aesthetic, as even across genres — be it hacker sim, RTS or global thermonuclear war — games from Introversion have a distinct style. “Perhaps it goes back to the whole question about total immersion; I think that’s quite an Introversion trait. It’s sometimes difficult to retain the courage of your convictions when everyone else is going in one direction and you decide to go in the opposite, but we really strive to create games that are totally original and unique. There’s a certain amount of obstinacy that comes with that.” Perhaps he was understating a bit, as this is the company with “We didn’t want any publishers f–cking up our game” on the public record. On a personal level, Chris says, “I’d been working in the games industry before Introversion, and all I really wanted to do was make the games that I wanted to make, not just another sequel. As far as inspiration goes, it can be quite random and unpredictable, although films and games, especially from the ‘80s, are the obvious sources.”

Indeed, Introversion games frequently feel like the kind of game you’d carry over to your friend’s house on a 5.25” inch floppy when dinosaurs ruled the

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will be profitable, not the developers, so we end up with this cookie-cutter approach to game development, with many publishers getting stuck in the design rut."

Moving back toward the graphics question, he says, "One of the great things about creating games with a retro look and feel is that they immediately stand out against the latest photorealistic offerings — no one ever confused Darwinia for anything else. One of our proudest moments was winning an award for artistic excellence, for Darwinia, at last year’s IGF awards, despite the fact that we’ve never had an artist working on our games. It just goes to show that photorealism is not the only avenue for the developer to take."

As a very small, very indie developer, Introversion tries "to stick to a simple design model … keeping content procedurally generated and to a minimum, working with stylized graphics and focusing on ambient elements like the soundtrack to enhance the mood and feel of a game. This is purely down to lack of resources and making the most of what we have. Troubles tend to arise when we depart from that model, as we did with Darwinia." Darwinia was Introversion’s most ambitious game, he says, "Darwinia had a lot more content in it than Uplink or DEFCON. It was also stylistically a much more challenging project, which meant that instead of taking the predicted 18 months to complete, it actually took us three years. This left us with a real financial headache, and by the end of it all, our morale was running pretty low. DEFCON was a dream to make in comparison, because there’s virtually no content in it, it’s just a pure game that’s scenario driven."

Delay is tight-lipped when I ask about their next game, Subversion, and opens with, "Actually, if I’d had my way originally, no one would even know the name of our next game! Not only that, but for the first time, I’ve been persuaded into sharing a lot more about the development process of this game with our fans, and we’ve set up a company blog for this purpose." He was a bit apprehensive about posting anything, he says. "You can set up expectations when you divulge too much too early, and you’re bound to cause disappointment when you make changes and the end product is different [from] what people were expecting. Because of
this, we’re not making any promises, and we won’t be talking about the features in-game, or how the final game will play. The development process has always been pretty fluid at Introversion, and we’re not even sure ourselves what we’re aiming for yet. Subversion has also really just gone into serious development, although it’s an idea that’s been floating ‘round in the company archives for quite some time, as far back as 2002. It was put on hold while we were finishing off Darwinia and DEFCON, and [has] been bubbling away in the back of our minds for years, so it’s had the most thinking time of all our games, and should hopefully reflect that in the end result.” I will acknowledge being a fan of the company to the point that knowing the title made me happy. It’s about subverting. Awesome!

Talking about the future of the company led me to ask about their relationship with publishers, which can be quite contentious. “Mark [Morris]’s rather controversial remarks at the IGF awards turned a few heads … [but] at the end of the day, we have quite set views on what the role of a developer and a publisher should be. The relationship should ideally be one of collaboration, but what often happens today is that the publisher tries to run the whole show, which can be a disaster when they start trying to dabble in the creative sides of things. We don’t have a problem working with publishers to sell a game, but they won’t be involved in the creative process, and for that reason alone, we like to own our own IPs. One of the problems for indies is that the publishers aren’t really interested — that’s the bottom line — and it can be a real struggle to get yourselves noticed and taken seriously. When Darwinia released, we were big enough to self-publish in the U.K., but the U.S. market is around 10 times larger, and we just didn’t have the staff. It takes a success story like the Darwinia launch on Steam, or winning awards at the Independent Games Festival, for publishers to sit up and take notice of us.”

That freedom can make it challenging to run a company, but it also allows them to make the games they want to make. “Subversion is my dream game,” Chris said, when I asked what he’d make if he could make anything. “At Introversion, we aren’t bound by the same resource concerns [as big game companies], because of the way we handle gameplay and content — and each game we’ve made has been our dream game at the time of it’s making.” Don’t expect Introversion to change, either, because the freedom they have, he says, was “why we started the company!”

Shannon Drake is a Contributing Editor for The Escapist and changed his name when he became a citizen. It used to be Merkwürdigeliebe.

“Subversion is my dream game.”
And then she’s gone.

She was the air that you breathed, the water you drank, the creature who - in a whirlwind of flesh - turned early nights into early mornings. Now she’s the toxin pumped into your gas chamber, the sand on your tongue and the nagging memory of that thing with their lips on your bare skin, which you know you’ll never feel again.

What do you do? What can you do? You are broke-up. You are Ex. That is, ex-human. Your life is over.

It’s time to build a new one.

Where to start?

You flip through the record collection, playing whatever makes you maudlin or angry or dramatizes your misery into something cinematically meaningful. You slob around, burning through entire DVD boxes of your favorite series while having chocolate conveyer-belted into your bedroom, or go the other way and tidy your house to the state of perfection. Turn similar puritanical instincts on your body, and try and get into shape to show her what she’s missing. Drink or drugs? Sure – after all, vodka will never leave or hurt you. Pull on the comfortable coat of boiling misanthropy. Start writing emo-kid poetry ... actually, no, it can’t be that bad.

Or you could pull out the right videogame.

We don’t tend think of videogames as utilitarian things, designed to perform a useful purpose. They’re mostly just “fun.” But that misses that fun is a purpose, too. Where there was a dull sense of boredom, there now exists a blessed and amusing distraction, and even that’s putting aside the hugely varied forms of fun which games can offer. Some find their home drunk on a Saturday night (fighters, sports games, SingStar, etc). Other games work best hungover on a Sunday afternoon (Civilization, Baldur’s Gate). And, following that logic, some games must work particularly well when you’re trying to avoid taking a set of nails and hammering them into your eyeballs, just so, for a single blessed second, you could feel pain unconnected with The Absent One.

I hadn’t really thought about how videogames worked in this context until the year when a certain young lady and I were involved in a course of mutually assured destruction. In the 12 months covering our affair, we split up five times.
We spent the majority of our time circling each other, as if we were stuck in a pit of our own making and involved in a knife-fight to the death. Before we had realized we could climb out any time we wanted, we got plenty of practice in Intense Splitting Up. So I ended up listening to a lot of early Nick Cave, drinking a lot of red wine and playing a lot of *Planescape: Torment*.

It just made perfect sense. Yes, it was a brilliant videogame – unarguably one of the greatest roleplaying games in the canon – but it was more importantly the right brilliant videogame. And years after the fact, thinking back more coolly on those days which became known as the “Evil Kieron period” among my long-suffering friends, I began to see exactly why.

Taking these realizations, I asked around, looking for other’s experiences from break-up games. A lot of what others were looking for mapped exactly into what made *Planescape: Torment* so appealing.

First, it isn’t hard. You’ve had your self-worth cut off at the knees and you’re left dragging yourself around, leaving embarrassing bloody emotional smears everywhere. Last thing you need is to be left staring at the “Play Again?” screen in something as brutal as *Ninja Gaiden*. You need to succeed, no matter how meaningless, to start rebuilding confidence.

Notably, this includes social interactions, especially with Sheena-Easton-voiced Tiefling Annah. Nihilistic in Northampton recalled his similar time with Troika’s broken masterpiece, *Vampire: Bloodlines*. “[It was] full of heartbreakingly broken women who you could, at 3:00 a.m., be convinced were actually really flirting with you. And you realized their powers of seduction were working on you, on some level, because your immersion in the game and stints of playing it way beyond tiredness, because you had nowhere else to go, and nothing else to do, meant you were open to even that level of artificial suggestibility.”

Not that the game being specifically over-kind is the only way to start reconstructing your self-image. Games also give more easily achievable goals; the manly warrior route: self-worth over your fallen foes. “[My] immediate response to a break-up from a most-of-university relationship was compulsive playing of *Tekken 3*,” recalled Simply Suicidal in Sheffield. “The all-too-obvious psychology behind it was this: Having just proved myself to be very bad at something (i.e. making a girl happy), trying to become very good at something more easily master-able was a logical response. There was nothing spectacular in my *Tekken* accomplishments - I didn’t tour Japanese arcades, claim world records or play for six weeks without sleep. All I did was repeatedly play as one character (Bryan Fury, to be specific) until I’d perfected just enough moves and strategies, and developed such an extreme, unpleasant reaction to the relatively rare occasions that I was beaten, that my housemates wouldn’t play against me anymore. They were both in happy, healthy relationships; I wasn’t, but I was better than them at *Tekken*. I won! (I really didn’t.)”

Coming down from a love affair can be like breaking an addiction. If you’re with someone whose very presence fills your body with sexy endorphins, their removal from your life leaves you crushed. The hardest bit of coming down is finding a way to fill the hours you previously devoted to the object of your affections. *Planescape* was full of things to do – it wasn’t challenging, but there was always...
something to think about. Which artifact to buy? Where to explore next? What's that angel creature really up to? Roleplaying games are an obsessive's dream.

"I plunged myself into RPGs." agrees Simply Suicidal. "I played Final Fantasy VII, Final Fantasy VIII, Planescape: Torment, Baldur’s Gate and the add-on Tales of the Sword Coast essentially back-to-back. I scoured each for every secret I could find, played through the night and spurned socializing. Each offered an easy way for an unhappy man to avoid the world for a few dozen hours."

This links closely to another key attribute of Planescape and RPGs – they’re a genre where story is central. You don’t just lose yourselves in actions and choices, but also a narrative. The anal mechanics distract the reason-centered left brain, when the humanity distracts the febrile, creative right. It’s especially potent considering RPGs’ propensities to lead to heroes who wrestle with their dark Byronic nature.

"Planescape rang truest," Suicidal notes, "mostly for its hero. A physically and mentally scarred loner who doesn’t feel he belongs, who’s the instrument of his own distress, who’s persecuted by forces he doesn’t understand? ... It was the gaming equivalent of listening to Leonard Cohen records and watching Taxi Driver on repeat."

It’s a common enough response. "One of my university chums receded into his shell after a breakup and immersed himself in Final Fantasy, Zelda and Secret of Mana games," noted Deeply Depressed in Dover, "I was pretty sure I heard him sobbing several times. He described [the games] as ‘duvet terrain.’"

While narrative can be important, it’s worth noting that tiny, relatively easy decisions act as soma in other genres, too. The purified hit of the puzzle game was regularly cited as useful post-breakup. "My boyfriend’s gone," said Catastrophically Cut-up in Cardiff. "I was pretty sure I heard him sobbing several times. He described [the games] as ‘duvet terrain.’"

"It’s entirely absorbing, in almost an autistic way, plus there’s cute animal faces in it," explains Catastrophically Cut-up, "They get angry-looking when I’m running low on time, but a quick few chains will return their status to happy. I like to watch emotions that are black and white - happy or sad - and which are easily fixed. I find this reassuring. Also, I’m capable of playing it for hours until my eyes are starting to close and I’m entirely exhausted, at which point I can just shut the DS lid and leave it on charge until the next night. I’m broken, but the game lets me pretend otherwise long enough to get to sleep. No thought invited or required."

The removal of unwelcome thoughts is key. In fact, if a game leaves room for recollection of better times, it may become unbearable. "Cruelly, a lot
of the games I’m most fond of – hardcore sims like *Microsoft Flight Sim* and *Silent Hunter 3* – are perfect for introspection,” sighs Isolated in the Isle of Man. “When everything is right with the world, having the space to daydream within a game is a wonderful thing. When life has turned to shit, it’s fatal.”

Not that all post-breakup gaming favorites share everything with *Planescape*. There’s the response which was memorably immortalized in British sitcom *Spaced*, where a jilted lover spends hours playing *Tomb Raider*. Not to actually get through the game – he just likes repeatedly drowning Lara Croft. We’re talking about bloody, dirty release.

“I’m a simple fellow,” claims Isolated. “I find sparkly slaughter and breakneck speed cure a multitude of ills. My comfort shooter is the original *Unreal Tournament*. A manic hour bouncing between the towers on Morpheus or goop-gunning for England on *Deck16* usually banishes most bad thoughts.”

“Playing [*Command & Conquer*] as China, on an easy setting, and just walling up your base, and building eight nuclear missiles, and unleashing them on the enemy all at once is the only catharsis you find,” agrees Nihilistic. Keep eyes open for a sales blip around Valentines for Introversion’s nuclear holocaust wargame, *DEFCON*.

Where next for breakup gaming? Well, this initial exploration into matters of the heart and the hard drive actually lead to elements which implies there’s an article to be written about pre-breakup and general relationship trauma gaming too. “I started obsessing over someone quite recently,” explains Guilty in Guildford. “I’m in quite a long-term relationship, so this is bad. So I started playing *Zelda* hard, very hard, so as to A) try and forget, and B) withdraw myself a little bit from [my] proper girlfriend. That way, she’d assume I was being distracted and distant because I’d been up all night playing *Zelda*. And not, say, because I was a bad, bad man.”

Also, don’t underestimate the effect of advances in gaming technology on the breakup game. Take Alienated in Auckland, whose post-split choice was *Siberian Strike* on his mobile. “Not because I had a hankering to shoot down some Russians,” weeps Alienated, “but so that if she called to apologize profusely and beg me to come back, I’d have the phone right there.”

But the primary attribute that makes *Planescape: Torment* a breakup classic on par with *Songs Of Love And Hate* and the nearest bottle of Chianti wasn’t actually hit upon by any of my correspondents. Fundamentally, as long as it is, as distracting as it is, as all-consuming as it is, it *ends*. You complete it, look up at the sun and realize you have to do something else. The duvet-terrain description of Depressed in Dover’s friend rings true. It gives you a place to lie, heal and lick your wounds; but after mourning, new morning. Get on with it, soldier. She wasn’t worth your time anyway.

So for God’s sake, don’t get into any MMOG game post-split. We could never see you again.

Kieron Gillen has been writing about videogames for far too long now. His rock and roll dream is to form an Electro-band with Miss Kittin and SHODAN pairing up on vocals.
Sorry to get personal, but how large is your - oh, what's the word - your guild? Or supergroup, clan, allegiance or other moiety of players in your massively multiplayer online game (MMOG) of choice? Does it have, perhaps, around 150 players?

And with how many of those players do you feel close, such that playing with them increases your immersion in the game? No more than a dozen, right?

Okay, maybe you're different. But if you ask around among the other players, most of them will hang out with fewer than a dozen people online, and they hardly ever belong to a group larger than 150 people.

That's not a limit in the game’s code or its interface. Some people suggest the limit is hard-wired in your brain.

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In 1993, Dr. Robin I. M. Dunbar, an evolutionary psychologist then at the Human Evolutionary Biology Research Group of the University College London anthropology department, was studying the behavioral ecology of primates, the relationship of primates to their environment. Dunbar analyzed numerical data from primate studies conducted worldwide. He observed certain "defining behavioural characteristics," such as "the time devoted to social interaction, the level of social skills and the degree of tactical deception practiced."

Dunbar noticed a given species always formed groups no larger than a certain size, and a member of that group always had about the same number of grooming partners. For instance, chimpanzee tribes have a maximum size of about 50 chimps, and each chimp has no more than two or three partners. Dunbar proposed maximum group size depends on the size of the primate brain's neocortex (the part that thinks) - the larger the neocortex, the larger the group. “Animals cannot maintain the cohesion and integrity of groups larger than a size set by the information-processing capacity of their neocortex.”

Extrapolating to human societies based on the size of the human neocortex, Dunbar theorized human beings naturally form groups no larger than about 150 (147.8, actually) and “cliques” of about a dozen. Dunbar’s paper, “Coevolution of neocortical size, group

The figure of 150 people has become known as “Dunbar’s Number.” The Number is a conjecture so far, supported only by statistical and anecdotal evidence. Dunbar, now at the University of Liverpool School of Biological Sciences, is conducting a 10-year study that may offer firm proof in 2008.

But some have already seized on the Number as proven fact. Malcolm Gladwell, in his bestselling 2003 business management book, *The Tipping Point: How Little Things Can Make a Big Difference*, popularized Dunbar’s Number (or, as he called it, “the Magic Number One Hundred and Fifty”). Similar books by Duncan Watts and Mark Buchanan advance the Number as a foundational structure for organizations and marketing campaigns.

On the web, humorist David Wong used the Number to launch a funny (but not-safe-for-work) screed about the “monkeysphere” - “the group of people who each of us, using our monkeyish brain, is able to conceptualize as people. ... [1]n our monkey brains the old woman next door is a human being, while the cable company is a big, cold, faceless machine. That the company is, in reality, nothing but a group of people every bit as human as the old lady, or that some kind old ladies actually work there and would lose their jobs if enough cable were stolen, rarely occurs to us.”

Today, Dunbar’s Number has gained currency among sociologists, anthropologists, managers and - increasingly - online game designers.

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The principal analysis of Dunbar’s Number as it concerns online gaming comes from Christopher Allen, founder of MUD operator Skotos Tech, on his intriguing (if sporadically updated) blog, *Life With Alacrity*. Starting with a lengthy March 2004 treatise, Allen spent half a dozen posts analyzing the Number’s relevance to online gaming:

“I’ve seen similar limits myself in some of the small online games that Skotos produces. For instance, in *Castle Marrach*, which is a social-dominant game (i.e. like a MUSH), the game grew quickly until we reached approximately 150-200 active users. However, whenever it grew beyond that number, it always seemed that politics and dissatisfaction would bubble up such that people would drop out, leaving us back close to 150 or 160.”

In an August 2005 post, Allen analyzed guild sizes in *Ultima Online* and *World of Warcraft*. (MMOG social scientist Nick Yee compiled the data in June 2005 at Allen’s request and presented it on the PlayOn blog.) The WoW breakpoint lay close to 50, versus UO’s 150, and smaller guilds were far more common in WoW than in UO. “If one-person guilds are excluded, the average guild size was 16.8, the median was 9,” Allen wrote.

“My guess is that there is something about Worlds [sic] of Warcraft such that even participating in very small groups can be useful, whereas for Ultima Online the utility is gained mainly by sharing the resources earned by larger groups. Thus Worlds of Warcraft has groups that are ‘bands’ as well as ‘tribes,’ while with Ultima Online groups are more likely to be just ‘tribes.’”

**Dunbar’s Number has gained currency among sociologists, anthropologists, managers and - increasingly - online game designers.**
Like Dunbar himself, Allen believes the limit of 150 relationships is practical mainly for groups faced with a strong reason to remain together, such as military units or tribes facing a hard-scrabble struggle for survival. In such large groups, each individual member may spend quite a lot of time on "social grooming." Absent this desperate environment, an individual will choose to maintain far fewer close relationships; this "non-survival-oriented" figure, Allen says, "hovers somewhere between 25-80, but is best around 45-50." He also postulated several other breakpoints in group size for practical working teams (five to nine members), small businesses (25-80), and larger businesses with middle management (500+). Above or below these ranges, group efficiency and satisfaction fall sharply.

(Allen’s analysis gained chilling confirmation from military theorist John Robb. In his blog about "fourth-generation warfare," Global Guerrilas, Robb analyzed the optimal size of an Iraqi terrorist network and a Mafia crime family. Both fit the same breakpoints as an MMOG guild.)

Of course, members of certain professional classes, such as doctors, salespeople and politicians, routinely socialize with hundreds, even thousands of acquaintances. Allen suggests this can work because these professionals practice "Dunbar triage": They spend far more time than average on their relationships, prioritize ruthlessly and meet most of their contacts in highly structured situations.

Allen moves into uncharted territory with "Cheers: Belongingness and Para-Social Relationships." He speculates that tracking a character’s created life on a TV show is a "junk relationship" that takes up a Dunbar slot. If this unsettling idea is true, it would help explain the social life of, say, a comic book fan, who can instantly recite all the melodramatic events of many hundreds of superheroes but has few friends.

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For social network theorists, not to mention guild leaders, this is all interesting. But is there really a Dunbar limit hard-coded into your brain?

Despite the statistics and anecdotal evidence, it's unlikely. Research has yet to determine the human brain's memory capacity. Back in the '70s, memory artist Harry Lorayne, about an hour before his nightly stage act, would go out front and mingle with his audience. He'd learn their names and interesting facts about them, and then during his show he would name each one, every member of an audience of hundreds. (If Lorayne plays World of Warcraft nowadays, he probably knows everyone on his server.) Obviously, just remembering someone’s name doesn’t mean he's in your monkeysphere. The point is, the human brain doesn’t melt down at 150 names.

More likely, the limitation isn’t in your cortex, but in your schedule. It takes time and energy to maintain a relationship. Physical space is sometimes an issue, too; one commenter on the Life With Alacrity blog observed that workgroups broke down when they got too large for one member to shout across the room to another.

Yet new venues like MySpace are simplifying this logistical challenge, and it will get easier as time goes on. Are we at the beginning of a "Dunbar Transformation"?
We can easily envision tech fixes that could expand your "socialization limit," in the way writing and data storage expand your "memory." Maybe Dunbar's cortical limit implies you can only think about 150 people at a time, at one given moment - hold their data in your personal RAM, so to speak, as opposed to your neural hard drive. If that's true, is it important? On the futurist site Edge.org, entrepreneur and mathematician Adrian Scott envisioned a technological platform that would permit us to maintain vastly expanded social networks by using tailored Customer Relations Management (CRM):

"We end up with personal CRM systems to handle our increased interaction load, and then add ... heads-up display style interfaces in glasses and, eventually, retinal and neuronal interfaces. 'Hi Jerry! Ahh... we met back in 1989, May 14th at 7pm, and since then we've exchanged 187 e-mails and 39 phone calls. I hope your cousin's daughter Gina had a wonderful graduation yesterday.' The whole range of interactions becomes organized. Introductions from one person to another and rating systems become automated."

(Game designers may someday help create such a reputation system. See "Game Design in the Transfigured World" in The Escapist 21.)

It's likely this "personal CRM" would evolve first in online games, where we routinely interact with hundreds of strangers, often worldwide. As this hypothetical infrastructure developed, your guilds would grow lots bigger, and you'd swim in a figurative ocean of friends and acquaintances.

Do you want that?

What do you expect from a relationship, anyway? That the other person attends your birthday party, knows your children's names and would lend you money in an emergency? (Or, in online game terms, will team with you and let you take the drops?) Possibly that's good enough, right now - but in the future, when anyone may know your name or do you a favor, will we therefore raise the threshold of "friendship"?

"With these trends, the friction costs of personal introductions go down, and consequently the value of quality measurement and gatekeeping go up dramatically," Adrian Scott wrote in his Edge essay. "As the depth of knowledge in a relationship increases, the threshold point at which you 'really know someone' increases also. It's an arms race of intimacy."

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.

What do you expect from a relationship, anyway?