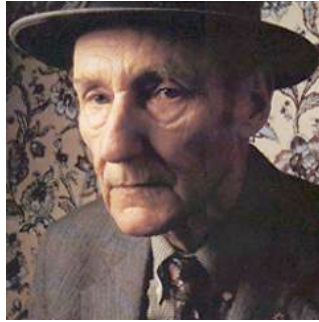# Clues to the Future

Andrew Hinton IA Summit 2006
Home: inkblurt.com
Employer: Vanguard

Questions = Scissors

When you cut into the present, the future leaks out.
- William S. Burroughs

This presentation is mostly about questions, and cutting into frames of reference to see the implications of things that are going on right under our noses.

I'll try to bring up practical implications where I can. But I mainly want this to be a conversation starter -- to get us thinking about what sort of a future might meet us as designers of shared information environments in the not distant future.
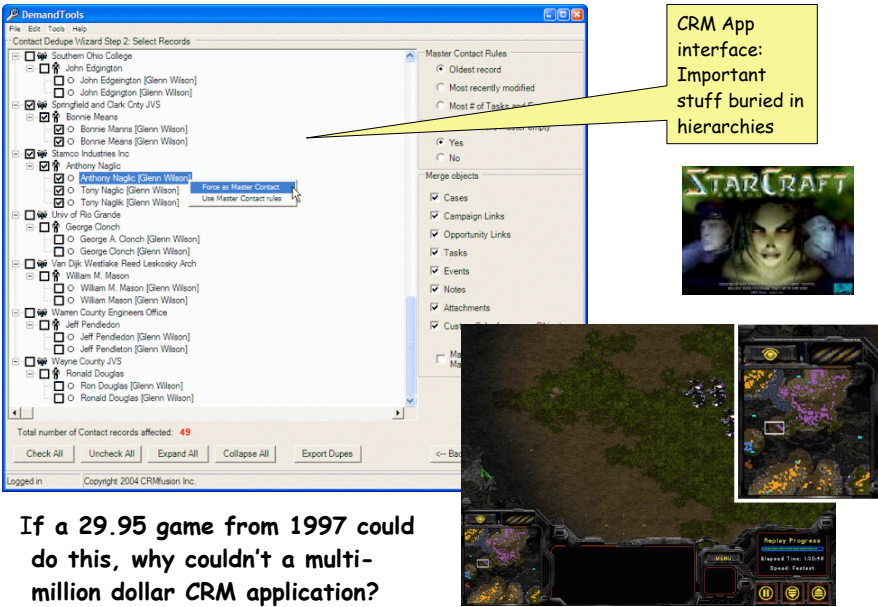
Several caveats:

This isn't an 'official' Vanguard presentation (something I'm supposed to say), although we do talk about this stuff at work.

I'm not an expert on any of this -- it's just what I can make out of a lot of research and insight in my context as a designer.

I'm trying to give credit where due for information I gleaned; some things I thought up myself but then saw others had too, or some things I may have thought I thought of but it really came from some other influence … who knows … but in cases where I'm quoting facts and research results, I'll point to a source.

What got me thinking about this … CRM & StarCraft

CRM App interface: Important stuff buried in hierarchies

If a 29.95 game from 1997 could do this, why couldn't a multi-million dollar CRM application?

In 2004 I'd been working on a CRM app for salespeople at work. (The one pictured is just a generic CRM app screenshot I found online) We looked at all the major CRM tools out there. But I'd been frustrated that so many of them were so unable to model the way real business relationships are structured.

CRM apps force you to deal with something as complex as your 'book of business' with flat, hierarchical windows-explorer type interfaces of folding lists.
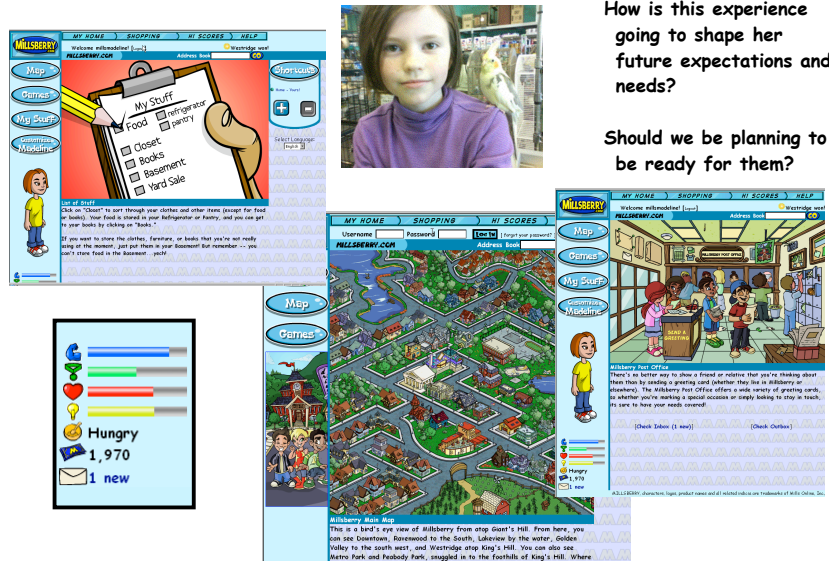
But that structure rarely reflects the actual priorities you have in any given period – usually you're circulating through a subset, and you also want to keep up with things that might be going on deep within that tree. These apps have some logic to handle things like this (though I'm not confident just how good it is), but no decent way to display it.

I kept referring to StarCraft and similar Real-Time Strategy games as great examples of complex interfaces for dealing with deep, dynamically shifting information domains.

In StarCraft, I knew what was going on at all times, through blinking icons and little maps and things. Once I learned the interface, in all of twenty minutes, it was pretty clear.

I thought… if a 29.95 game from 1997 could do this, why couldn't a multi-million dollar CRM application?

What got me thinking about this … Madeline & Millsberry

How is this experience going to shape her future expectations and needs?

Should we be planning to be ready for them?

My daughter, Madeline, was hanging with me at work in July and was playing busy working away while I was working. Millsberry, the General Mills game for kids.
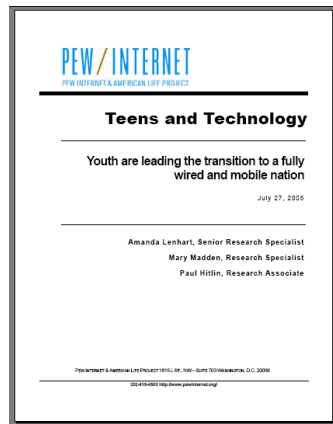
-Working very hard at earning currency

-Resource management

-Miniature economy

Reminded me of other MMO's that I haven't played before, but have heard of. As well as others that I *have* played in the past (MUDs etc)

I realized… I never had any game as a kid that engaged me this much that also taught me anything about earning and managing resources. I didn't have anything this immediate … realized that NeoPets and other sites are essentially the same.

I wondered … what will these kids expect from our designs later? How is their current experience going to shape their expectations and needs?

Pew/Internet: Teens & Tech

PEW/INTERNET
PEW INTERNET & AMERICAN LIFE PROJECT

Teens and Technology

Youth are leading the transition to a fully
wired and mobile nation

July 27, 2005

Amanda Lenhart, Senior Research Specialist
Mary Madden, Research Specialist
Paul Hitlin, Research Associate

Pew Internet & American Life Project 1615 L St., NW - Suite 700 Washington, D.C. 20036
202-419-4500 http://www.pewinternet.org/

"Teens are technology-rich and enveloped by a wired world."

"Always On"
• Broadband + mobile = "always there"
• Prone to log on wherever there's connectivity.
• Internet is their primary social infrastructure.
• (Ubiquitous Computing is here now.)

Interesting bit to call out:
• 80% wired teens play games online.
  (71% of all teens)
• Games are not peripheral: they're part of
  the social infrastructure too.

• 87% 12-17 yr olds use internet, up from 73% in 2000.
• 83% say "most" people they know use internet.
• 84% own at least one personal internet-capable device
• 51% wired teens have broadband (a recent tipping point)
• Over half of wired teens have created content for the net

These changes are extremely rapid.

I also ran across the Pew/Internet Teens study that summer. It gives a powerful picture of the behaviors and expectations of the first wave of the truly 'digital generation' – people who grew up with the web.

And here, by the web, I mean the Internet and a whole host of things that implies, which we'll get into. Just keep in mind that when I say web or internet, I'm not limiting myself to a specific protocol; I mean them as rubrics for the new paradigm they represent. (Even this report defines 'internet' as TCP/IP, and doesn't count mobile-phone text messaging as part of the "internet" – but that's missing the point, I think.)

Several key things here:

1. They're wired practically all the time and have broadband, which is a tipping point for the way they use the net.

2. They expect to be wired in lots of places (ubiquitous access isn't novelty, it's an expectation)

3. The net is their primary social infrastructure. And they can tool around in it with their own devices, sooner than most older folks had cars that gave them that kind of independence.

4. The vast majority play online digital games (we'll get to this in more detail later), and those games are part of their social fabric.

5. This is happening really really fast.

How do we get ready?

Ok, fine, but what are we supposed to do about this?

Let's just suppose… that learning how this generation will interact with information environments and post-internet marketplaces can be observed and learned about **right now**?

Remember this statistic??

"Eight in ten wired teens play games online. (71% of all teens)"

PEW/INTERNET
PEW INTERNET & AMERICAN LIFE PROJECT

Teens and Technology

This is pretty self-explanatory… but it's where I say get ready, this is really a thinly veiled presentation about video games. But not just "video games" -- rather what they represent as a paradigm, both in terms of design and cognitive behavior for a new generation.

Serious Games

"Persuasive" games -- one of the magic bullets that's supposed to buttress advertising now that everybody has a Tivo.

Of course, there have been educational games around forever. And the military started using Doom as a training engine over ten years ago … and lately has been using more sophisticated game engines to advertise the excitement of a military career.

This field is exploding, becoming very important for advertisers and anyone else who wants to persuade or teach anyone.

This field has also been a big deal in the learning sciences, and has spawned a lot of the research that I'll refer to later.

However, my talk isn't about literal games -- so I'm bringing these examples up partly as a counterpoint to the rest of my presentation. That is, I'm not saying go and put games on your sites and that'll meet the challenge. Rather, the abstracted, conceptual design patterns and best practices we see in games today can instruct us in conventional design for the future.

> **"Are you asking me to take non-serious games seriously?"**
>
> MMOGs (Massively Multiplayer Online Games)
> - Ultima Online (Electronic Arts, USA) Population: 225,000
> - EverQuest (Sony Online, USA) Population: 430,000
> - Lineage (NCSoft, South Korea) Population: 4,000,000
>
> **EVERQUEST**
>
> - EverQuest GNP in 2003: $135,000,000
>   - EverQuest GNP per capita: **$2260**
>   - Russia GNP per capita: $2250
>   - China GNP per capita: $520 ...
> EverQuest is the 79th Richest Nation on Earth
>
> Yeah but that's games, that's nothing compared to "real" media, right??
>
> Spider-Man 2 Movie opening weekend sales: $115 Million
> Halo 2 Game opening *DAY* sales: **$125 Million**
>
> Most of this swiped from Julian Dibbell's presentation: "Ownzored"   2004 Thanks Julian!

As just one example of how important games are to culture, and how huge this elephant in the room is, I point out some numbers. These are actually a little bit old, but they still impress.

The point is that it's a very significant part of our economy and our lives, and that most of us haven't heard about it much because there's a cultural bias in the West especially that overlooks games as not being 'real' business or 'real' serious design.

Sources:

Julian Dibbel: "Ownzored!" (PowerPoint Deck) http://game.itu.dk/comwork/itu_program.html
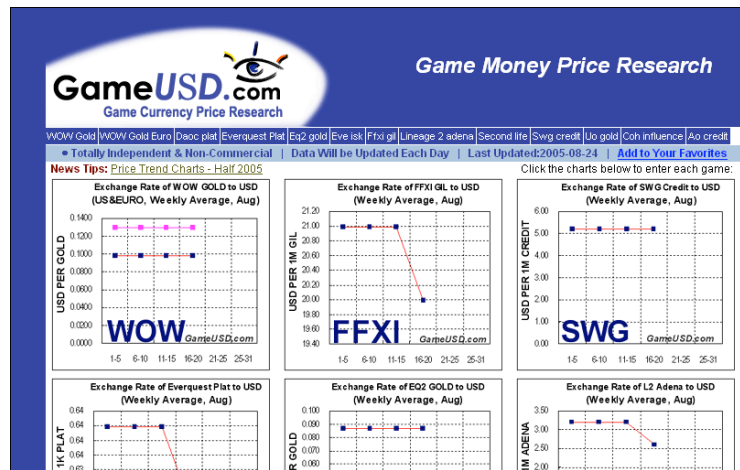
"Birth of a Nation": http://www.cbc.ca/arts/media/halo.html

Also see: Alternate Reality

The history of massively multiplayer online games.
http://archive.gamespy.com/amdmmog/week1/

"How much is that in Norrath Dubloons?"

GameUSD.com
Game Currency Price Research

Game Money Price Research

WOW Gold | WOW Gold Euro | Daoc plat | Everquest Plat | Eq2 gold | Eve isk | Ffxi gil | Lineage 2 adena | Second life | Swg credit | Uo gold | Coh influence | Ao credit

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News Tips: Price Trend Charts - Half 2005

Click the charts below to enter each game:

Exchange Rate of WOW GOLD to USD
(US&EURO, Weekly Average, Aug)

USD PER GOLD
0.1400
0.1200
0.1000
0.0800
0.0600
0.0400
0.0200
0.0000

WOW GameUSD.com

1-5   6-10   11-15   16-20   21-25   25-31

Exchange Rate of FFXI GIL to USD
(Weekly Average, Aug)

USD PER 1M GIL
21.20
21.00
20.80
20.60
20.40
20.20
20.00
19.80
19.60
19.40

FFXI GameUSD.com

1-5   6-10   11-15   16-20   21-25   25-31

Exchange Rate of SWG Credit to USD
(Weekly Average, Aug)

USD PER 1M CREDIT
6.00
5.00
4.00
3.00
2.00
1.00
0.00

SWG GameUSD.com

1-5   6-10   11-15   16-20   21-25   25-31

Exchange Rate of Everquest Plat to USD
(Weekly Average, Aug)

1K PLAT
0.64
0.64
0.64
0.64
0.63

Exchange Rate of EQ2 GOLD to USD
(Weekly Average, Aug)

R GOLD
0.100
0.090
0.080
0.070
0.060

Exchange Rate of L2 Adena to USD
(Weekly Average, Aug)

1M ADENA
3.50
3.00
2.50
2.00

There are fascinating legal and economic issues being explored regarding game currencies and markets.

There's talk and controversy of your earnings being taxable.

This could be a whole presentation in itself (and has been at a number of conferences; plus a whole book, by Edward Castranova, called Synthetic Worlds, is an excellent and brand-new entry in this field of discussion: http://www.press.uchicago.edu/Misc/Chicago/096262in.html

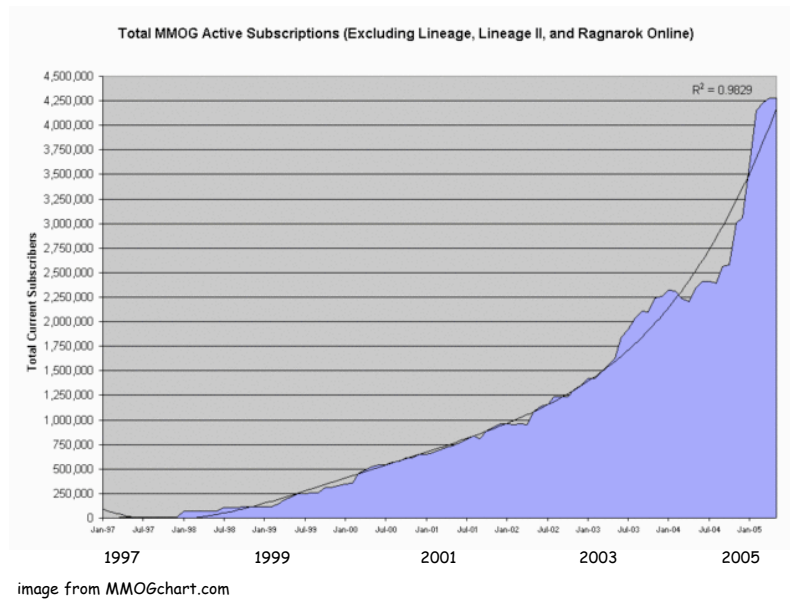He covers more than economies, but he tackles that very well.

A slightly stranger question:

How does this affect how we measure economies, or assets?

I'm not saying that when these people become adults that they'll have half their retirement in EverQuest, but in what way will it affect how they perceive things like Mutual Funds, or PayPal?

But why not ask the question: What if somebody wants to pay for your goods in EQ currency? Will you have the exchange rate?
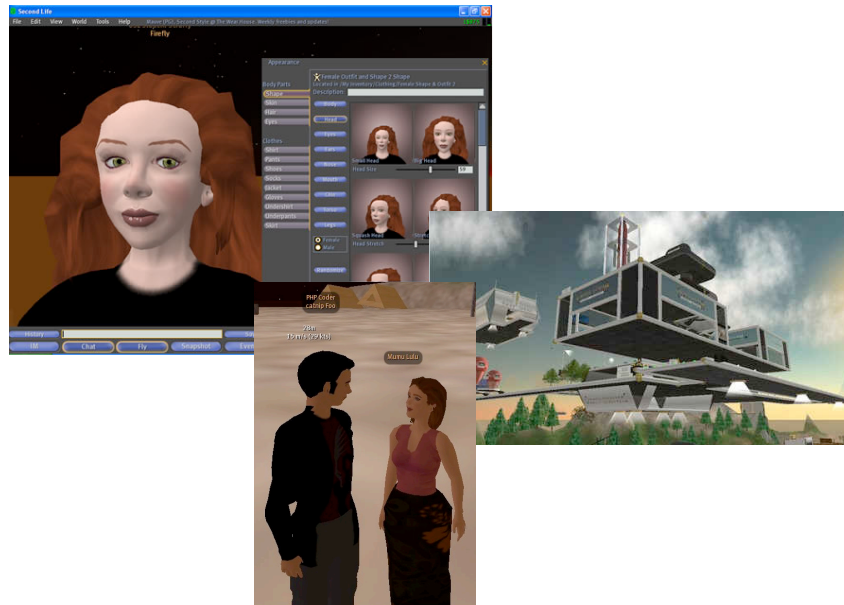
Exponential growth especially in MMOGs

Total MMOG Active Subscriptions (Excluding Lineage, Lineage II, and Ragnarok Online)

$R^2 = 0.9829$

image from MMOGchart.com

MMOGs in particular are experiencing exponential growth.

In the late 90s, it was just geeks doing this stuff, but it has skyrocketed.

Second Life

An example: Second Life.

Examples of what you can do there: make an avatar with tons of detail; create buildings people can walk around and live in, play in, socialize in.

Second Life: Stage Coach Island, by Wells Fargo

Wells Fargo recently opened an island in Second Life.

http://www.secretlair.com/index.php?/clickableculture/entry/wells_fargo_buys_second_life_island

So, one of the oldest financial institutions in North America spent actual time and money on building an island in Second Life. You can learn about CDs and Mutual Funds there, or mortgages, from live personnel, and play games and stuff. It's a serious game inside a non-serious game, in a virtual world with virtual currency, where you're learning about real currency regarding the 'real' economy.

Press Release:

Wells Fargo Introduces Stagecoach Island – Industry's First Virtual Reality Online Game to Help Young Adults with Financial Literacy

Leading Financial Services Company Pilots Innovative Digital Program in San Diego and Austin, Texas

San Francisco — September 14, 2005

"Wells Fargo today introduced Stagecoach IslandSM, a free, multi-player, online role-playing game developed to teach young adults important lessons in financial literacy. Wells Fargo is the first financial institution to use an online game of this kind for both financial education and entertainment purposes. Young adults in San Diego and Austin, Texas are the first to experience the Stagecoach Island game in a pilot program that kicked off Labor Day weekend this year and will end in mid-November." (more at the link)

Games Research

There are a lot of things represented here, and these are just some of the places online that are working with games seriously -- the social science of how people interact with games and each other in game environments. There is serious science going on here, much of it stuff that we could be learning a lot from, but we never talk about.

From Wikipedia: Video game studies (Also see Videogame theory Lat. Ludology) is the still-young field of analysing video games from a social science or humanities perspective.

[Two major strains/theoretical frameworks -- narratology and ludology]

----supplementary:

COMMUNITY MANAGEMENT: http://game.itu.dk/comwork/

Multiplayer game designers and administrators are not simply engaged in creating stable game structures and systems of play but are deeply involved in the creation of communities, cultures, and behaviors. While much has been discussed around the technical challenges MMOG's pose, this symposium takes up the subject of community management and suggests that the design and maintenance of these vibrant worlds pose some of the most interesting challenges facing games today. The symposium will be a day-long event on the subject of community management in games and will focus on issues of:

- General community management (what do you have to do to keep it running?)

- Community vs. company governance (the political structure of game worlds and practical daily management)

- Trust

- Griefplay, "troublemakers," cheating (and also more broadly who defines what is legitimate gameplay?)

- Labor in games (volunteers? paid administrators? what is the best structure and what issues arise with each type)

- Developing the culture and social aspects of a game (and how much should admins act as gods?)

- Integrating various types of players into a gamespace

- Intellectual property issues in games

(Sounds a lot like this other discipline I've heard of …)

"Games are 'designed experiences'… and as such, their study requires an understanding of the full range of human practices through which players actively inhabit those worlds of rules and texts and render them meaningful."
They are both "designed objects and emergent culture."

Constance A. Steinkuehler "Why Game (Culture) Studies Now?"

Great similarity with major obsessions of Information Architecture: personally this is one of the best descriptionsof what I do as an IA that I've ever seen.

Design Overlap

Conventional Web & Software Design

Digital Games Design
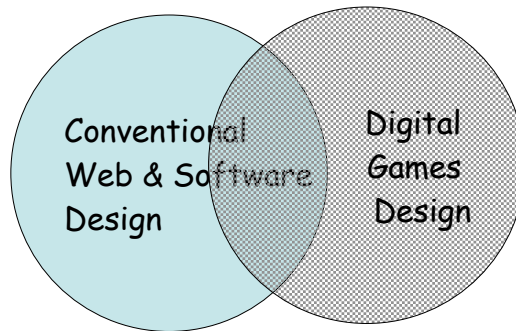
A lot of things we're finding as "design patterns" in conventional design are cousins of design patterns (and "game mechanics") in digital games design.

What if, by learning more about the rest of the game circle, we learn more about what the conventional circle should be like in 5-10 years? How might that perspective affect our long-term design strategies?

There are many design principles in common between the two fields.

The point is that learning about young users' behaviors and expectations in the rest of the gray circle will help us know what the content of the blue circle should look like 5-10 years from now.

"That is why we are all so excited about the promise of this **new generation of game-inspired user interfaces and technologies**. We have already seen the creation of some pretty spectacular virtual worlds around games. Now we can't wait to see what will happen … with applications in business, entertainment, science, engineering, health care, education and just about every other area."

Irving Wladawsky-Berger
VP Technical Strategy & Innovation at IBM

http://irvingwb.typepad.com/blog/2005/08/enabling_the_ne.html#more

This is serious business. And it's not just a crackpot idea … even Irving WB at IBM has blogged about it.

Info Complexity: Multitasking   "I can do it all just fine, thank you."

Do we think about interruptions and multitasking in our designs now, or do we assume our product is the only thing the user cares about at the moment?

So we're going to go through a few tropes or design patterns found in games that we may want to be considering now as we're spending money and making decisions that'll affect our technological and design abilities 5-10 years from now.

Information complexity:

Interfaces empower users to be more strategic and effective in high tension game environments. They also allow users to attend to other tasks, such as social communication (chatting).

They're about performance / more years of evolution.

Multitasking … it's been somewhat controversial, and varying studies have shown it's either good or bad. Those studies tend to be biased in one way or another. But one somewhat incontrovertible fact is that youngsters seem to be better at it -- they've learned earlier and have adapted more readily. Either way, even now a typical knowledge worker is interrupted mid-task every few minutes. This isn't going to go away.

--Design Implications: We can't monopolize screens, or assume we have undivided attention.

(screenshot from gamespy.com)

Do you test for the constant interruptions people have in a multitasked environment when you test your applications in your labs and such? Because if you're assuming users are only going to be paying attention to your app and nothing else, you could be making some big mistakes. It needs to not only not break when people are interrupted, but may need to complement their multitasking.

Info Complexity: Interface Sophistication   "Show me to tell me."

Interface Literacy: They can learn many different
visual languages, if they're well designed.

"Bowl Bound College Football" Review

From Courtney Marchelletta,
Your Guide to Computer Simulation Games.
FREE Newsletter. Sign Up Now!

Guide Rating - ★★★★☆

The Bottom Line

Sports fans must try out "College Bowl Bound Football." I don't even like college football that much and it's one game of the few games that will stay installed on my laptop. It has the depth of features and ease of use that will make both regular and casual gamers entertained for hours.

This is a very complicated interface, but it got a great user review.

Kids are used to learning multiple interfaces in minutes at a time … but only if they're well designed. We don't need to be afraid of complexity if we've gotten the design right.

Also, games have, in a bottom-up sort of way, been developing interface conventions(and other design patterns) that, once they start to work, others copy them and they continue being used. Just like "about" pages on web sites, or steering wheels on cars.

It's a little facile to say that they're more visually oriented and therefore more shallow. The fact is that, because technology has made visual communication (I.e. graphical / pictorial representation) much easier to reproduce all over the place, and because (this is important) there's so much more information to process that we *need* visual cues, structures and tools for getting around in it, these folks have grown up looking for those things first and textual context as support. It's not a radical conversion -- just a shift in emphasis from textual language to visual language. It's still language, and it's still literacy.

sources: www.bowlbound.com and www.about.com

Info Complexity: Heuristic!   "Let me learn to do it by doing it."

Any successful console game now allows a user to jump right in and start using it, and teaches along the way. Just like in Sponge Bob Squarepants and the Battle for Bikini Bottom!

FORRESTER

Poor Contextual Help Erodes Shoppers' Trust
Online shoppers have many questions about costs, shipping, returns, and privacy. None of the five major retail sites recently reviewed by Forrester answers all these questions. To build shoppers' trust, eCommerce sites need to provide answers to the specific questions shoppers have at each step in the buying process.
- Kerry Bodine, Forrester Research, March 2005

In Spongebob Squarepants and the Battle for Bikini Bottom, help is very easy to find… and you don't have to read a manual to use the game. You just jump in and do it, and it teaches you as you go. You don't learn anything except for when you really need it. It doesn't take the user out of the experience.

We didn't have the technology to do this with our objects until recently, but now that it's here, people are having less and less patience with going without it.

What may be seen as impatience is probably just difference in approach. There have always been people who preferred to jump right in and try something … and many years of support for learning this way (Montessori anyone?). Technology is just allowing that desire to be amplified among users.

http://www.forrester.com/Research/Document/Excerpt/0,7211,36548,00.html

image from nickelodeon's game, name mentioned.

Info Complexity: Calm Messaging

"Don't interrupt me!"

Animation notifies where events take place

Text messages fade after a short period
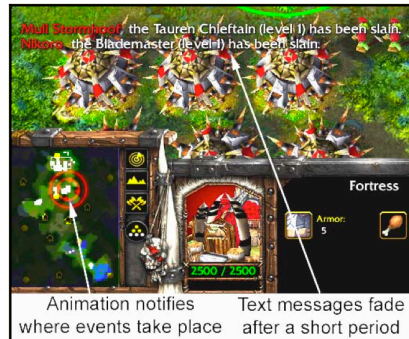
Games have shown that reducing demands on the user's attention can aid performance; through the use of sound, speech, transient text, and animation, games communicate in a calm manner that promotes a fluid, uninterrupted workflow.

Dyck, et. al.: Learning from Games: HCI Design Innovations in Entertainment Software

http://hci.usask.ca/publications/2003/games-gi03.pdf

"Calm Messaging" -- messages show up briefly then disappear; or status alerts that wait for a response rather than interrupting the current task.

Info Complexity: Nodal Space — "Give me a compass, not just a map." — Map of "Second Life" — Organic, emergent spaces and experiences that behave more like real life. — Especially new "procedural generation" games, that grow from algorithms. — Will Wright's "Spore" — How users manage these spaces teaches us a lot about how they manage the huge, emergent information domains we can't control.

This is the first modern generation that has used a non-hierarchical method for finding shared information on a regular basis. (Presumably pre-modern folk were doing a lot of hunting in the woods and such.) And perhaps the first of any generation to grow up being used to making semantic-relational *leaps* from one thing to another in spaces like the Web. What does this do to their expectations about information in general? How does this affect cognition and culture?

Unlike the left-to-right arcade games of old, the newest and most successful games allow roaming, exploration, discovery.

Rather than structuring the environment as a whole for comprehensibility, they give tools for navigation.

In some environments (like the Second Life map above) users collectively create an organic place.

In others, things like "Procedural Generation" are used to generate organic conditions on the fly -- emergent reality from algorithms.

earlier notes:

You don't know where you're headed .... with procedural generation (synthesis) --- no prefabricated spaces or content, and even if you could identify patterns, it's getting so rich and complex that all you can do is set up generalities within which experience will be as varied as it is in real life. http://en.wikipedia.org/wiki/Spore_%28game%29
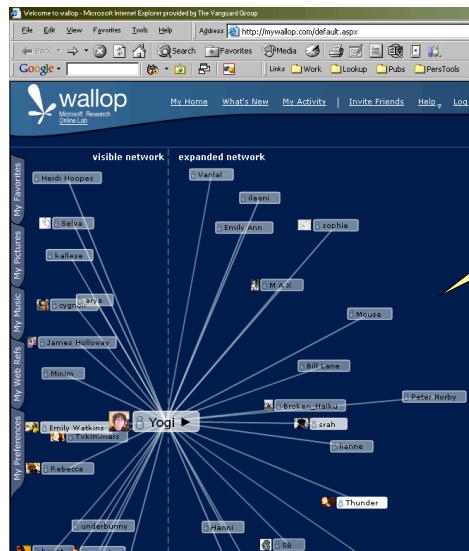
http://portal.acm.org/citation.cfm?id=604490

Social networks are organically-produced procedural generation, for example.

Pervasive Gaming: http://www.seanstewart.org/beast/mcgonigal/notagame/paper.pd

Wallop is a powerful social network engine in beta from Microsoft.

Imagine if these nodes were accounts and companies and contacts, all moving dynamically based on algorithms tracking relevance and what fires need putting out or who's on your calendar when?

But this is also to demonstrate that the visual categories and mental models of upcoming users are different -- they're more comfortable with these shifting, nodal environments -- it would possibly freak out or confuse most mature business users now. But would it? Have we even tried it?

Prosumers: Peer to Peer

"I am King of All Media."

Producer + Consumer = Prosumer

No, I did not just make that up.
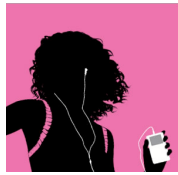
• Podcasting
• Blogger
• LiveJournal
• FaceBook
• GarageBand
• MySpace
• etc etc etc …

Kids have access now to create all kinds of media and share it at will. There's nothing magic about being a creator of content now; it doesn't automatically give any authority. That is, just because you can publish to a million people doesn't automatically make you authoritative or worth listening to -- you have to earn that respect, since the barrier to entry is lowered and just being out there to read isn't necessarily an indicator of worth.

Previous Notes:

(I had some stuff about wikipedia, but took it out) There's been a lot of hullabaloo about Wikipedia lately. Regardless of what critics say, it's being used, it's growing, and it is a success at what it is … which isn't the same as the traditional authoritative encyclopedia.

The collective intelligence or participatory content creation model is growing in general, and we should ask ourselves how this shapes the expectations of the next generation. Do we need to be ready to design things to allow for this kind of participation where possible? Or even if not that, how are users' assumptions about authority changing? Does it mean we have to talk differently, or back up our claims better? Some say that information literacy is becoming more adroit, and that people who have grown up in this fluid information culture will have a more finely tuned sense of evaluating content for accuracy or authority.

MySpace is a huge success -- some have said it's because they were lucky, some say it was the music fanbase linking, and some say it picked up because it was the most configurable and that teens especially want "places of their own." Either way, millions are used to being able to shape their identities online (we'll get to that more later) and create content for themselves and their social circle.

I wonder if what we're seeing is a kind of specialized game experience -- where it's about social capital rather than virtual gold?

What might these people expect when they hit the workforce, and find their intranet is rigid and bottlenecked?
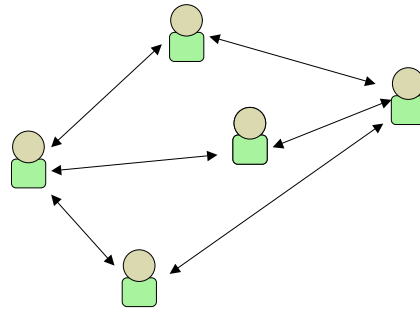
From Pew Study:

Teen Content Creators and Consumers:

More than half of online teens have created content for the internet; and most teen downloaders think that getting free music files is easy to do

http://www.pewinternet.org/PPF/r/169/report_display.asp

Prosumers: Peer to Peer

"Gimme that microphone."

"HIS MASTER'S VOICE"

This trademark and the trademarked word "Victrola" identify all our products. Look under the lid! Look on the label!
VICTOR TALKING MACHINE CO., Camden, N. J.

PODCAST
Governor's Weekly Radio Address

Authentic voices only, please!!!

The old broadcast mentality is dying. It'll still be around a little, like opera. A specialized form that was once the dominant paradigm. But the world is becoming a peer to peer place. And you have to earn your attention -- authentic voices only.

Prosumers: Games = Community   "Clan WarPenguin Represent!"

Many Facets of Community:

- Guilds
- Location
- Conversation Channels
- Friends Lists
- Explicit Teams (Clans)

Successful game environments integrate architectures that encourage social discovery and community building -- built into the software.

Image and ideas from Dyck, et. al.: Learning from Games: HCI Design Innovations in Entertainment Software
http://hci.usask.ca/publications/2003/games-gi03.pdf

Games make it easy to connect to other gamers.

Look at the facets of community that are available in Warcraft!

Every facet of community is another way to organize and get things done.

How many ways does Lotus Notes allow us to organize? Collaborate? Not even new stuff like BaseCamp does it this well.

What about Adobe Photoshop… millions of users using the app, plus millions of them in discussion lists and wikis trading knowledge on how to use it … but when you go to "Help" in Photoshop, it's self-contained and pre-written by Adobe, and doesn't link you to any of those amazing sources of collective, collaborative knowledge.

Image and ideas from Dyck, et. al.: Learning from Games: HCI Design Innovations in Entertainment Software
http://hci.usask.ca/publications/2003/games-gi03.pdf
This is a terrific paper, and I ripped this entire slide's ideas from it, essentially.

Prosumers: Work and Incentive

Why would people spend so much time on things they aren't paid for?
Is it just in explicit "fun" games with goals to "win"?
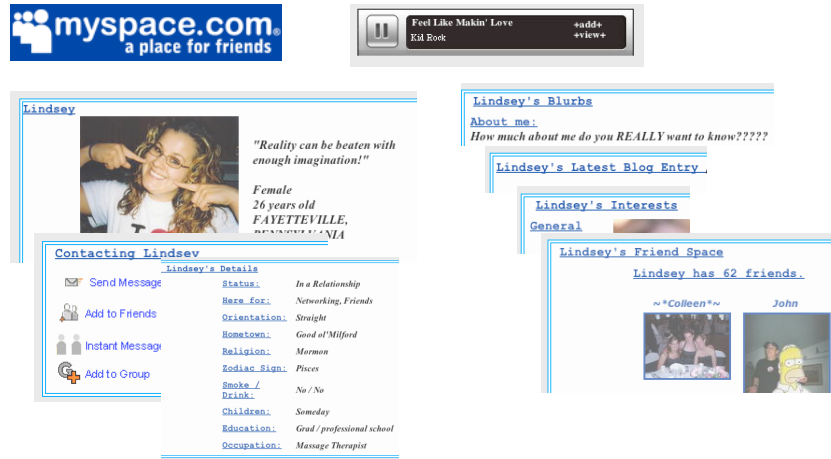
Comments / Connections / Identity

Ok, so is it just games that give people this kind of incentive?

Let's look at myspace…it's a big deal lately. Growing like mad.

it provides many ways of creating an identity online … lots of ways to express and shape oneself.

But look, there's a way to "rank" users -- isn't that a competitive element? And what about the number of friends: when I was in high school, I didn't have a sign on my back saying how many friends I have.

Essentially, what this environment does is take all the invisible, soft stuff about finding one's identity in a social context, and the high-school stuff we all worried about, and makes it utterly explicit. It digitizes it and makes it into stuff you can pick up and manipulate and tweak.

A side note: myspace isn't very well designed. Its interface is buggy and clunky; its labeling is confusing and overlaps. It's slow.

But in spite of all that, it's a huge success… because there are just enough basic things it does that other social networking apps didn't do. It allows you to make connections in many different ways, and to express yourself in more ways, and to customize/personalize the space more than friendster and others ever did. Plus you can subscribe to friends' blogs and other bits … it all feeds on itself powerfully. This is the 'architecture' of Myspace -- the labeling, taxonomy and interface are just supportive of the larger architectural structure. (I didn't get into this in the talk, but I think it's significant -- it shows that successful architectures are bigger than perfect controlled vocabularies)

Prosumers: "Grown Up" Incentive and Work

Yeah but professional people don't bother with stuff like that, right?

The Social Capital Game!

(Isn't Web 2.0 just a rediscovery of what the web was about to begin with?)

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so is this stuff just for kids who are goofing around online?

Not really … I was hooked by this visual at LinkedIn. If it had just been words or a suggestion, I wouldn't have bothered. But seeing the visual and seeing how close it was to being 100% hooked me big time, and I started sending off endorsement requests before I even thought about it. I didn't realize how this was functioning for me until later.

Essentially, this is a 'game mechanic' for The Social Capital Game. And it's a very powerful game, and frankly is the foundational game behind all the other ones. Even World of Warcraft and others.

Another beef: this is Web 2.0 right? But isn't what this represents just more functionality on top of what the Web was created to be to begin with? It seems we lost sight of the real purpose of the Web -- the dot bubble and lots of other red herrings kept us distracted. But all along, the web was for people to share information, build knowledge, and as a result build reputations.

Prosumers: Multiple Identities

"I contain multitudes."

MY YAHOO!

Public Information
Public profiles:
- RealEstateTyc00n
- EbayBirdhouseSeller
- bellydancerfan0yeah

Edit/Create Profiles

Yahoo! People Search:
Create a Listing

Madness or Duplicity??

Relationship Diversification!

Identity is a hot issue in general -- stolen identities, federally mandated identity tagging, etc.

Just think, though … not long ago, the very idea of having more than one "alias" was strictly the behavior of criminals. But now it's considered common, at least in online life.

It may be wise to pay attention to how this generation is using identity. How might it translate?

Will these users want to have different accounts for different purposes, all linked together? How will their previous experiences affect how we structure their commercial online relationships?

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previous notes and some other references:

Because the activities I engage in are crucial to my identity. Who I am determines, and is reflexively determined by, my participation in various communities (Gee, 1999; Greeno, 1997). As Packer and Goicoechea (2000) put it, "A community of practice transforms nature into culture; it posits circumscribed practices for its members, possible ways of being human, possible ways to grasp the world—apprehended first with the body, then with tools and symbols—through participation in social practices in relationship with other people. Knowing is this grasping that is at the same time a way of participating and relating." (p. 234) In other words, changes in knowing become changes in being: Through participation in a given Discourse (Gee, 1999), I do more than just acquire and reorganize mental representations of the world; who I am, who I see myself to be, is transformed by it. http://website.education.wisc.edu/steinkuehler/cogtheory.html
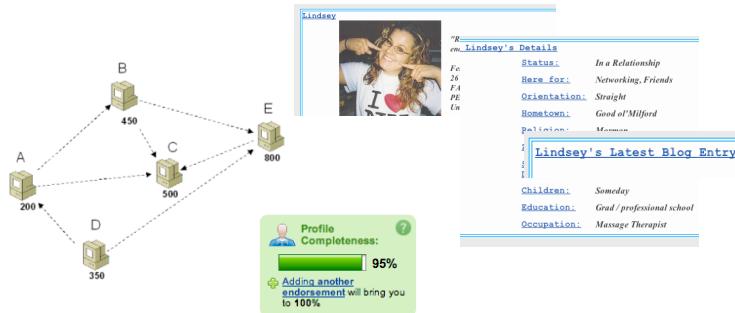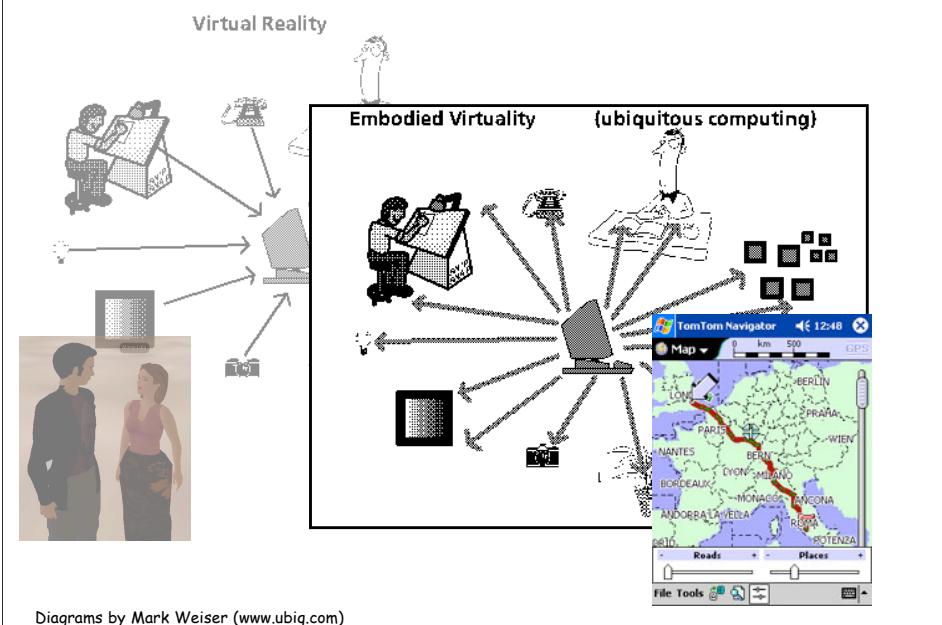
How is this different from a company's intranet?
What elements could be translated?

so why aren't these key elements being used on your intranet? why aren't we using them for IAI??

Ubiquity: Virtual Reality Spills Over

"I want my VR in my RL"

Diagrams by Mark Weiser (www.ubiq.com)

Hybrid & synthetic worlds are becoming more like the natural one; and the natural one is being affected by the synthetic one(s)

Mark Weiser on u.c.: "Ubiquitous computing is roughly the opposite of virtual reality. Where virtual reality puts people inside a computer-generated world, ubiquitous computing forces the computer to live out here in the world with people. Virtual reality is primarily a horse power problem; ubiquitous computing is a very difficult integration of human factors, computer science, engineering, and social sciences."

The virtual is spilling over into the 'real' …

Ubiquity: Game Environment Research

TATUS: Ubiquitous Computing Simulator
(Created in the Half-Life game engine)

TATUS uses a game environment to
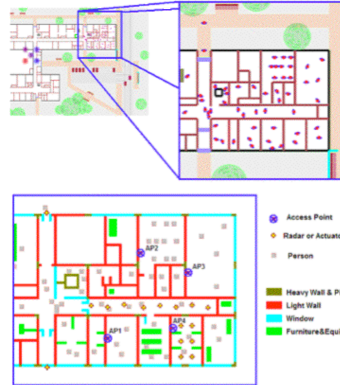study ubicomp behaviors that can't
feasibly be studied in 'real life'
https://www.cs.tcd.ie/Dave.Lewis/files/05a.pdf

Figure 8. Example of environment
segmentation for ray-tracing prediction

TATUS research: "This paper describes TATUS, a ubiquitous computing simulator aimed at overcoming these cost

and logistical issues. Based on a 3D games engine, the simulator has been designed to maximize usability and

flexibility in the experimentation of adaptive ubiquitous computing systems."

https://www.cs.tcd.ie/Dave.Lewis/files/05a.pdf

This stuff is quite relevant -- it shows us that game environments are close enough to how people behave in real life that we can learn from them. Also it tells us a lot about ubiquitous computing, the coming future, and how we might need to prepare for it.

Ubiquity: Pervasive Gaming (aka Alternate Reality Gaming)
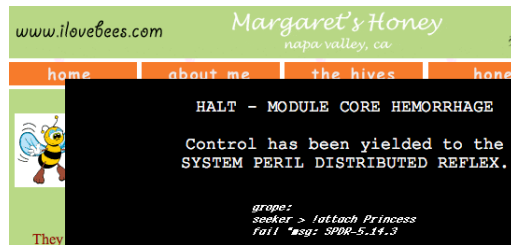
Incredibly successful 'alternate reality' game designed to spill over into real life, to launch Halo 2.

- Jars of honey sent to unsuspecting members of a gaming community
- mysterious phone calls, emails, etc.
- engaged a whole community in collaborative play and problem solving

Designed by Jane McGonigal who wrote
"This is Not a Game: Immersive Aesthetics and Collective Play"

Turning the ubicomp issue on its head, pervasive gaming mashes up the real and the virtual. There is a lot of serious science behind how and why this worked so well.

It's like "Lost" but you're on the island.

"This is not a game" is an allusion to the Magritte "This is not a pipe" painting, which has been referenced by Morville and Weinberger at this conference. It's a significant meme worth pointing out … the merger of map and landscape.
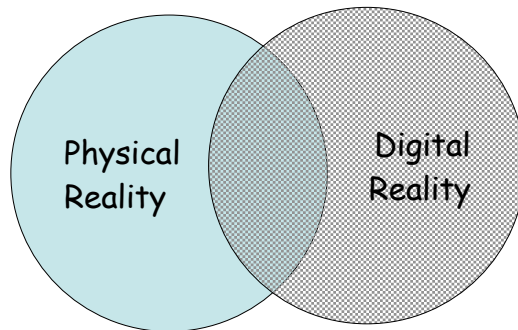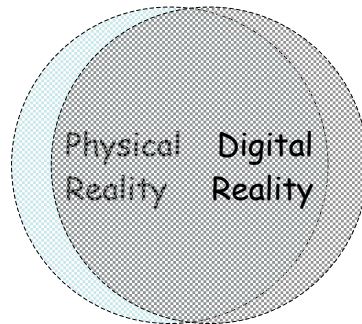
http://www.avantgame.com/

http://www.girardin.org/fabien/catchbob/pervasive/

http://www.pervasive-gaming.org/

http://www.ercim.org/publication/Ercim_News/enw57/lindt.html

Physical Reality

Digital Reality

So just like the game and conventional overlapping circles, physical and digital realities are doing it too.

Physical Digital
Reality Reality

"The Game Layer"

as they merge further, the and become more porous, we'll be in a world where our physical surroundings are "on the network" and part of the "map" … this is the future, and it is really coming. It's not Philip K Dick fiction anymore. Why not learn from the nascent version of this coming reality now, by studying it and taking it seriously?

I'm calling this overlap the "game layer" because I think we should realize how game theory (the mathmatics) and game studies can inform and serve as successful theoretical frameworks for understanding and designing for this coming reality.

Feel Challenged?

Impress me.
I dare you.

'Final' version and bibliography at: www.inkblurt.com

So here she is. Madeline. Your future user.

I'm a little intimidated. So I'm sharing the challenge with you. Good luck.

You can get the final version of this and a lot of links to other references at
http://www.inkblurt.com/ia-summit-2006/

Thanks!