THE PAST, PRESENT AND FUTURE OF GAMES

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• So, I was told to expect a **Mixed** audience today
  – Members of the General **Public**
  – Researchers
  – Games Students

• I was also given a very **Broad** and very **Deep** topic on which to speak
  – “The past, present and future of games”

• Frankly, this is an **Impossible** task, so I’m going to fail **Miserably**
• When I ask my students to suggest some old games, this is what they say:
• **GAMES ARE MUCH OLDER THAN THAT, THOUGH!**

  – “**OH, YOU INCLUDE NON-COMPUTER GAMES?**”
THE PASTEST

• NO, OLDER THAN THAT, TOO

- “SPORTS ARE GAMES, THEY’RE REALLY OLD!”
THE PRE-PAST

• NO, NO, NO! **THIS IS HOW OLD GAMES ARE:**
• Far from being a modern phenomenon, games are older than humanity.

• Of the other arts, only music and dance can make the same claims.
  – Eat that, literature!

• Now you may have noticed that I sneaked in a notion there that games are art.

• Well yes: game design is an art form and games themselves are works of art.
  – Except evolved folk games such as tag.
OLD GAMES

• OBVIOUSLY, HUMANS DESIGN BETTER GAMES THAN DO ANIMALS

• ARE OUR GAMES TODAY BETTER THAN THOSE OF THE PAST, THOUGH?

• WE’VE ADVANCED TECHNOLOGICALLY, BUT HUMANS IN THE PAST WERE EVERY BIT AS CLEVER AS WE ARE
  – THEIR BRAINS WERE THE SAME AS OURS

• THEY DID WHAT THEY COULD WITH THE TECHNOLOGY AVAILABLE TO THEM
Here's an example of what I mean:

Sir Gawain and the Green Knight is one of the greatest works in medieval English to survive to the present day, that is:

- It was probably only thought of as a minor piece when it was written in the 14th century.

It's extraordinarily well studied.

It's a poem 2,530 lines long grouped as 101 stanzas (paragraphs) collected as four fitts (chapters).
• **Sir Gawain and the Green Knight** is a Middle English alliterative **romance**
  – romance as in **heroic quest**
• The stanzas **end** with a five-line “**bob and wheel**” that **comment** on the other lines
• The way it was **used**, each evening the **audience** would be read a **fit**
• They had the **next day to discuss what had happened and what they thought would happen**
• The plot concerns the Green Knight — Be knyȝt in be grene
• He challenges the knights of the Round Table to chop his head off, on condition he gets to do the same in a year and a day
• Sir Gawain volunteers to do the deed
• He decapitates the Green Knight, who then picks up his head and rides off
• When the anniversary approaches, Gawain goes to meet his fate
• He comes across a castle where he is made a welcome guest

• The lord of the castle proposes an exchange

• He'll give Gawain what he kills while out hunting if Gawain gives him whatever he receives while the lord is away
  – Gawain, a little puzzled, agrees

• Only, when the lord goes out hunting, his wife kisses Gawain
• This happens **three** times, with the events of the hunt **reflecting** Gawain’s experience with the lord’s wife

• **Finally**, she gives him a **charm** to defend against decapitation
  – He **accepts** it but doesn’t **declare** it

• On the day he **meets** the Green Knight, he readies himself to be **killed**

• Yet the Green Knight only **nicks** him!

• **He** was the lord and it was all a **test**
So why am I mentioning this?
The story is about a game
  - The beheading game
  - It's a common game in medieval literature
It also has the exchange game
Gawain cheats at the exchange game to cheat at the beheading game
This is why he gets a nick
  - Outward scars were seen as symbols of inner corruption
• The middle English word for game is **gomen**
  – It's used **18** times in this poem

• The middle English word for man is **gome**
  – It appears **21** times, 15 in reference to the green knight

• This **isn’t** for alliterative purposes
  – It’s **never** used with Gawain

• It tells us the green knight is **playing**
The poem contains much wordplay — it's packed full of puzzle elements — words with double and triple meanings.

It's a game being played by the narrator on the audience — what's more, the audience regarded it as such at the time.

As for what it's saying?

People treat life as a game, because life is a game.
• THIS IS A VERY HUNGRY CATERPILLAR
Sir Gawain and the Green Knight has been studied in incredible detail as literature, but not as a game.

Games are studied, but never as games—They’re always studied as something else.

Here’s a rough list of the order in which games have been studied—Not the order in which they were invented.

Note: The first two were probably studied in ancient times, but we’ve lost the theories.
• GAMES HAVE BEEN STUDIED:
  – AS PHENOMENA OF **PROBABILITY** (GAMBLING – JACOB BERNOULLI, EARLY-18TH CENTURY)
  – AS **SIMULATIONS** (WARGAMES – PRUSSIAN GENERAL STAFF, EARLY-19TH CENTURY)
  – AS **APPLICATIONS** (EDUCATION – FRIEDRICH FRÖBEL, MID-19TH CENTURY)
  – WITHIN THE **CONTEXT OF RULE SETS** (CRICKET AND BASEBALL STATS – HENRY CHADWICK, MID-19TH CENTURY)
  – AS **PSYCHOLOGICAL** PHENOMENA (SPORTS – NORMAN TRIPPLETT, LATE-19TH CENTURY)
  – (CONTINUED NEXT SLIDE)
– **AS CONTENT-CREATION** SYSTEMS (STORY GENERATION
  – WILLIAM WALLACE COOK *PLOTTO*, EARLY-20TH CENTURY)

– **AS CULTURAL** PHENOMENA (ALL GAMES – HUIZINGA, MID-
  20TH CENTURY)

– **AS COMPETITION** (GAME THEORY – JOHN VON NEUMANN,
  MID-20TH CENTURY)

– **AS SOCIOLOGICAL** PHENOMENA (SPORTS SOCIOLOGY –
  NORTH AMERICAN SOCIETY FOR THE SOCIOLOGY OF SPORT,
  LATE 20TH CENTURY)

– **AS OBJECTS OF CRITICAL** STUDY (GAME STUDIES – ESPEN
  AARSETH, LATE 20TH CENTURY)

• **NONE OF THESE STUDY GAMES AS GAMES**
• Now that **may** seem a little **unfair** – particularly on game studies

• There’s nothing even in **that** about game design, though

• There are **books aplenty** on game design, but no matching **theory**

• This is because **wider culture** has yet to **move** enough to consider games as **art**

• We only get to study them at **all** because computer games make so much **money**
• **Up until recently, games research was driven by a **negative attitude to games**

• **Academics who built their careers on an anti-games platform are now seeing that hewn from beneath them**

• **Psychologists who for two decades have said violent games make people aggressive** are at particular risk

• **Let’s look at correlations**
  
  – $R=0$ no correlation; $R=1$ 100% correlation
**Example 1**

- Here's what a Pearson product-moment correlation coefficient looks like for scatter diagrams:

- The left one is for $r=0.99$, the right for $r=0.9$
  - For $r=1$, the dots would all be on the $x=y$ line
Example 2

• Now let's look at **smaller** values:

• The left has \( r=0 \), the right has \( r=.3 \)
  
  – Hard to tell which is which if I hadn't said

• The correlation between playing violent games and showing aggressive behaviour is **consistently** around \( r=.15 \)
• The tide is **turning**, but we have yet to get to the point where people routinely **talk** about game design as an art form.

• It **has** to be one, because how could it **not** be?

• Aside, **non-gamer** art types will often ask, quite **patronisingly**: "But can a game ever make you cry?"

• There's a one-word **answer** to this

• **Permadeath**
Part of the reason for slow progress is that game designers lack a common vocabulary for describing games – they have words but no formalism.

Worse, new would-be designers are often mis-taught by people who know nothing about game design – if your understanding of the term “mechanics” comes from the MDA framework, don’t use it in front of professional designers.
Designers need a formal system for annotating gameplay.

Music, dance, poetry and architecture have such systems.

Why can’t we have one?

The best we have are:
- Game design patterns, that help wannabe designers but constrain accomplished designers.
- Some attempts at game grammars, which only work for limited mechanics.
When discussing the **Future** of games, people tend to think **hardware**.

This is because they play **video** games and have been **trained** over the years to value **graphics** over **gameplay**.

**Interface** is not **gameplay**.

**Games** are **gameplay**, **not** interface:

- There's no **night** in SW:TOR because cut scenes
- Night would have added **gameplay**
- A **BAD** INTERFACE CAN **DESTROY** GAMEPLAY, **BUT A GOOD INTERFACE CAN'T CREATE IT**

- [TELL THEM THE FUTURE OF VR?]

- THE FUTURE OF **GAMES** WILL COME FROM THEIR **GAMEPLAY**

- THAT **SAID**, SOME GAMEPLAY-TO-COME MAY ONLY BE **ENABLED** BY BETTER HARDWARE

  - TALKING TO NPCS FREEFORM IN NATURAL LANGUAGE, FOR EXAMPLE

- **SO WHAT IS** THE FUTURE OF GAMES?
• I SAID AT THE BEGINNING THAT THIS IS A MIXED AUDIENCE

• THE FUTURE OF GAMES FOR YOU DEPENDS ON THE SUB-AUDIENCE OF WHICH YOU’RE PART
  – MEMBERS OF THE GENERAL PUBLIC
  – RESEARCHERS
  – GAMES STUDENTS

• YOU WON’T NECESSARILY STAY IN THAT GROUP INDEFINITELY, THOUGH
  – SO PAY ATTENTION TO THE FUTURES OF THE OTHERS!
• People who play games **develop** in their understanding of them

• **30,000,000** copies of *The Very Hungry Caterpillar* have been sold, but adults aren’t reading more *Caterpillar* books

• They’re reading more books

• Likewise, although players may **start with casual games**, they’ll move on
  
  – They won’t necessarily all move on in the same direction, though
• Just because people **START** with the very hungry caterpillar, they don’t all have to **END** at the same place

• **SOME** end with Tolstoy’s War & Peace or Shakespeare’s Sonnets or García Márquez’s short stories

• **MOST** are going to be happy with Dan Brown or E.L. James or Jeffrey Archer

• A small **FEW** will turn to writing their own fiction (games, in our case)
• We’re already **seeing** this happen
  - **Eg.** A move from **casual** games to **light management sim games**

• Some **simple** casual games have gone **frighteningly deep**
  - **Eg.** Find-the-hidden-object games

• This is **fine** if the **gateway** games are still shallow, but can be self-defeating
  - Adventure games went **too deep** and died
  - [Tell them about **Gabriel Knight 3**?]
• Games now have **clout** they didn’t before
• Because of this, they’ll become more **niche** and more **sophisticated** (like books)
• You **will** get better games
  – As in, better for you
• You **will** have a great deal of **choice**
• It’s all looking **great**!
  – The only **worry** is that the revenue model has to be worked out so people can afford to **make** games
Researchers

• Researchers will get to play games too, but they’ll also get to study them.

• They can do all the things they were doing before, but on better games:
  – Applying games to your field (e.g. Economics)
  – Applying your field to games (e.g. AI)
  – Playing games for fun and pretending it’s research (e.g. Games Studies)
  – Creating tools to help make games
  – Creating tools to help analyse games
• THAT **LAST** ONE IS AN OPEN DOOR TO **UNEXPLORED** TERRITORY

• GAME ANALYSIS PROMISES HUGE **REWARDS** YET IS ALMOST ENTIRELY **UNEXAMINED**

• IF YOU GET IN **EARLY**, YOU COULD HAVE A **THEORY** NAMED AFTER YOU!
  – [TELL THEM YOUR DIJKSTRA ANECDOTE?]

• GAMES PROMISE TO OPEN UP **AMAZING** **NEW** AREAS OF RESEARCH
  – ONCE THEY BECOME ACADEMICALLY **RESPECTABLE**...
• **YOU’LL GET TO MAKE GAMES!**

• **PEOPLE WILL KNOW YOUR NAME!**

• **OK, SO FEW PEOPLE KNOW THE NAMES OF GAME DESIGNERS NOW, BUT THAT WILL CHANGE**

  – **HOLLYWOOD LOST ITS STUDIO SYSTEM BEFORE EVEN I WAS BORN, AND GAMES WILL GO THE SAME WAY**

• **AH, BUT WHY DO YOU WANT TO MAKE GAMES INSTEAD OF WRITING BOOKS, SCREENPLAYS, OPERAS, BATTLE PLANS, GREETING CARDS..?**

  – **“EVER SINCE I WAS A SMALL CHILD...”**
Houses

• I love living in houses!
• They keep the weather out and stop wild animals from attacking me in my sleep
• Houses are great!
• That doesn’t mean I want to be an architect or a construction worker, though
• Why do you want to make games?
Well, games are vehicles for personal expression.

You can say things in games that you can't say any other way.

Some people say things through music or painting or sculpture or dance or...

Your medium is game design.

It's a new medium, too.

-- Games are old, but game design is new.
OPPORTUNITY

• **NOW IS A WONDERFUL TIME TO BE A GAME DESIGNER!**
  – IT'S LIKE BEING AN ARTIST IN THE RENAISSANCE

• **YOU HAVE THINGS TO SAY – SO SAY THEM!**

• **DON’T JUST MAKE GAMES BECAUSE MAKING GAMES IS FUN, THOUGH**
  – SO’S PUSHING OVER SMALL CHILDREN, BUT YOU CAN’T MAKE A CAREER OUT OF THAT

• **MAKE GAMES BECAUSE WHATEVER IT IS YOU WANT TO SAY, GAMES LET YOU SAY IT**
• Let’s return to that **mixed audience**...

• **The past** of games is the **same as the present** and the same as the future
  - **The general** public always has played games and always will play them

• **The present of games defines the future** of games
  - Researchers can understand games as they were and are, and so shape what they will become
The future of games is the people who will make them.

- It's the same for every art.

The game students among you will use games to speak to people.

- To reach people in ways that haven't been seen before.

To find out who you are yourselves.

To take what the present tells you about the past and make that future.
CONCLUSION

• WE’RE GOING TO GET BETTER GAMES
  – WE’RE GOING TO UNDERSTAND WHAT MAKES THEM BETTER
  – WE’RE GOING TO UNDERSTAND HOW TO MAKE THEM BETTER
  – WE’RE GOING TO UNDERSTAND THAT THEY ARE AN ART FORM WITH A POWER UNLIKE ANY OTHER’S

• GAMES HAVE THE POTENTIAL TO FREE HUMANITY

• PEOPLE TREAT LIFE AS A GAME, BECAUSE LIFE IS A GAME