

# Research into Interactive Digital Narrative: A Kaleidoscopic View

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Milestone Moment

IDN through the Kaleidoscope

First Wave 1966-1993

Acceleration 1993-1997

Second Wave 1997-2017

The Disciplinary Advantage

Studying IDN as its Own Context

IDN-specific Aesthetic/Formal Vocabulary

*Coda: Shrödinger's Narrative*



# A Milestone Moment

Critical mass of objects to study

Critical mass of scholarship

Distinct framework

Overlaps with other disciplines

Self-validating

 Hartmut Koenitz  
@hkoenitz

Following 

Post Thanksgiving re-announcement (Please RT)

Introducing [#ARDIN](#)  
(Association for Research into Digital  
Interactive Narratives),

Sign up for news and to be part of the  
discussion at [signup@interactivenarrative.org](mailto:signup@interactivenarrative.org)

More here:

[facebook.com/ICIDS/posts/87](https://facebook.com/ICIDS/posts/87) ...

**ARDIN**  
ASSOCIATION FOR  
RESEARCH INTO DIGITAL  
INTERACTIVE NARRATIVES

10:37 AM - 28 Nov 2017

# Kaleidoscopic view

Same objects in multiple coherent arrangements



<https://myamericancrafts.com/products/white-diamonds-three-mirror-kaleidoscope>

# Kaleidoscopic View of IDN Research



Interactive Narrative Research is a coherent disciplinary pattern



There are multiple taxonomies of IDNs possible within IDN Research



IDNs support analysis of the same event in multiple contexts

IDNs support imagination multiple variants of the same scenario



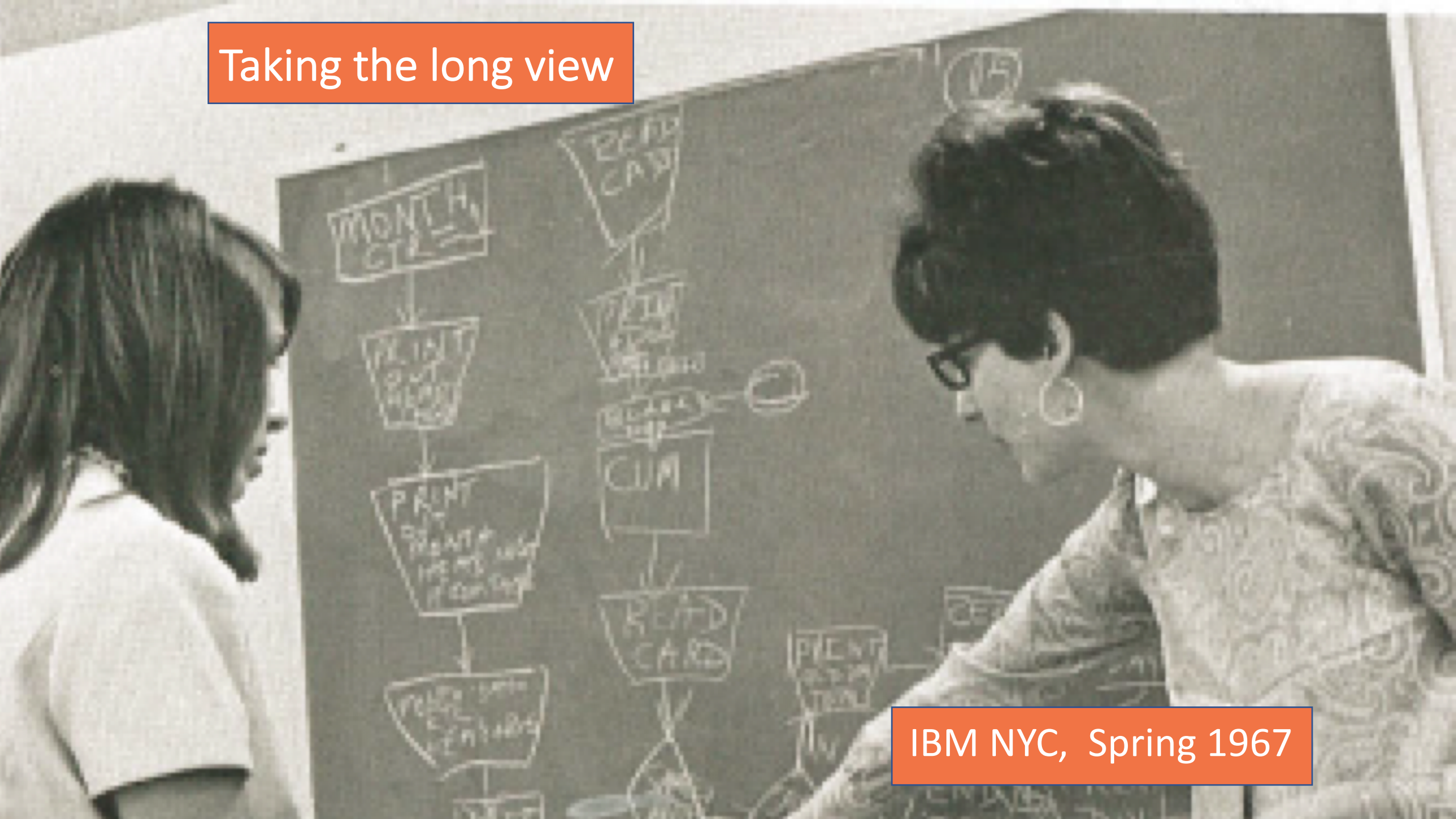
Taking the long view



The Book of Kells c800



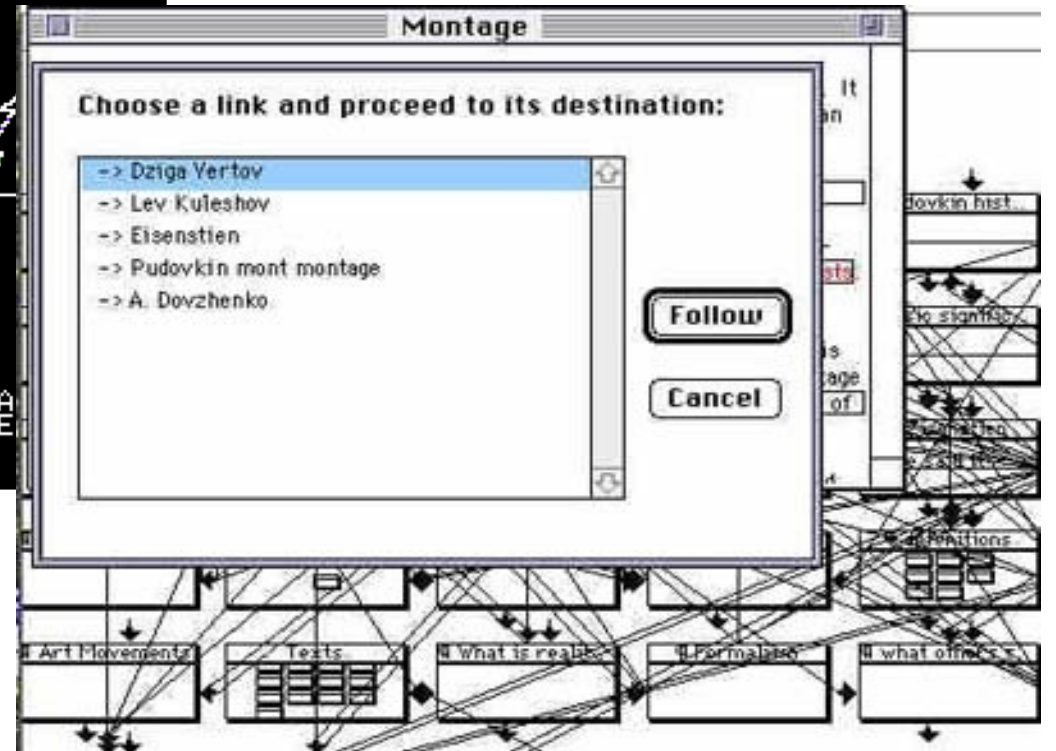
Taking the long view



IBM NYC, Spring 1967

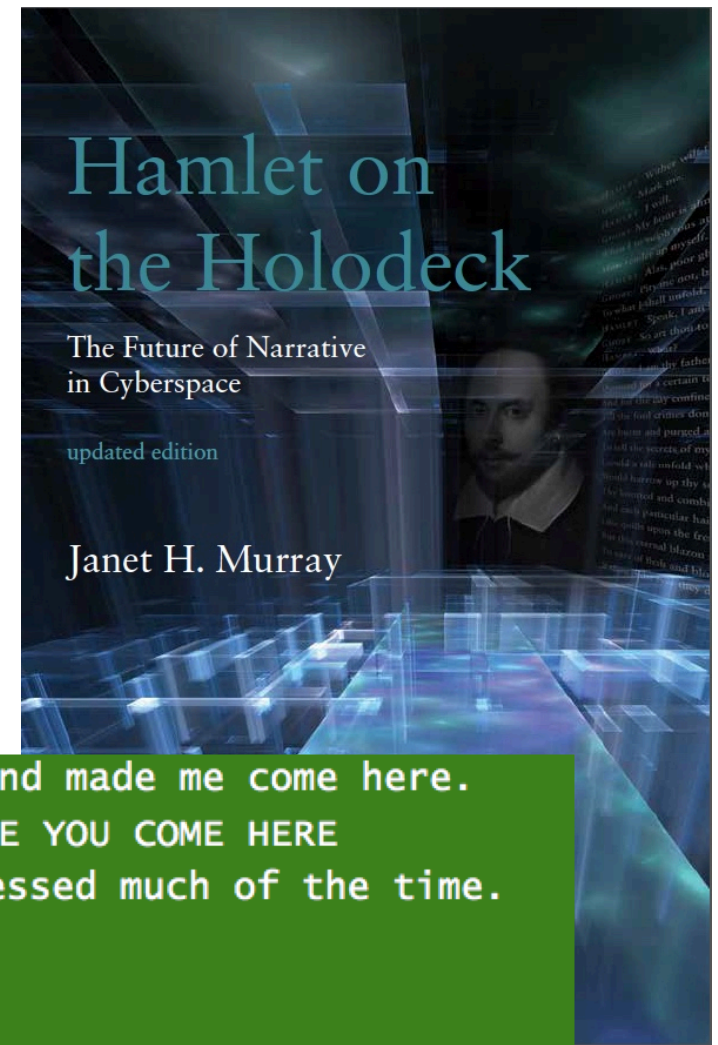
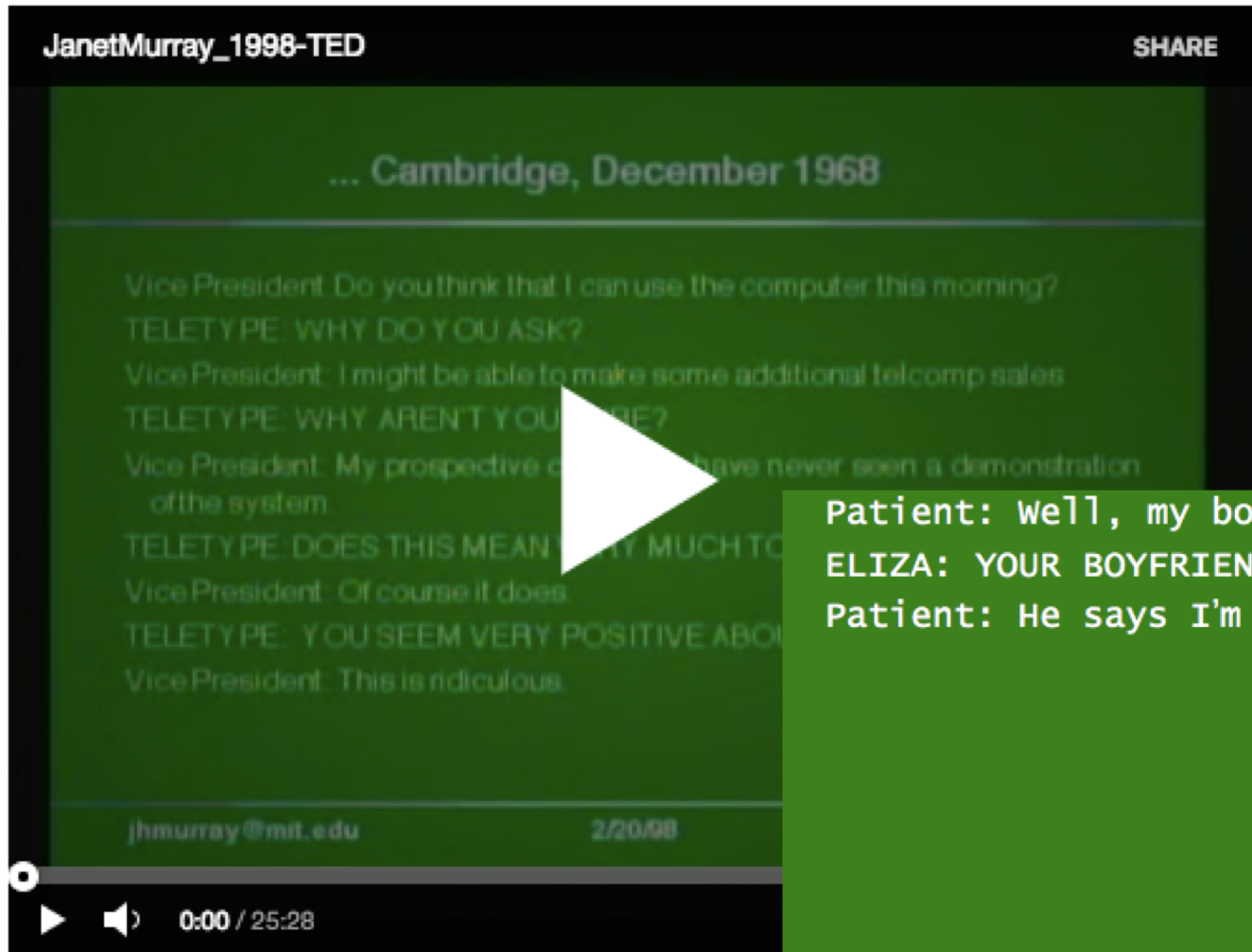
# First Wave 1966-1996

Patient: well, my boyfriend made me come here.  
ELIZA: YOUR BOYFRIEND MADE YOU COME HERE  
Patient: He says I'm depressed much of the time.



# The First Interactive Digital Narrative

## Joseph Weizenbaum, Eliza 1966



<https://inventingthemedium.com/2015/05/14/my-ted-talk-1998/>



# The First Wave: Computational Silo

Eliza (1966) → Chatbots, AI research

Adventure (1975) Zork (1977) → Infocom (1979-89) → Text adventures, RPGs

Text-based MUDs (forerunners of MMORPGs) (1978-)

Theory

Roger Schank, *Scripts, Plans, Goals, and Understanding* (1977)

Association for Computers in the Humanities founded 1978

*In 1994, Espen Aarseth and Janet Murray spoke at ACH at the Sorbonne. The President of ACH referred to “glitzy” applications that were overvalued compared to important work like the TEI.*



# The First Wave: Adventure Games Silo

Sierra On-Line

Mystery House (1980)

King's Quest Series (1980-1998, 2016)

Nintendo *Super Mario Brothers 3* 1988

LucasFilm

*Monkey Island Series*(1990-2010)



Theory:

Clara Fernandez-Vara, *Shaping Player Experience in Adventure Games* (2008)

*In 1980s, Infocom fans greeted games with graphics like movie purists who resisted talkies*

# The First Wave: Hypertext Silo (Literary Community)

Storyspace community of practice 1987

Michael Joyce, *Afternoon* 1987

Stuart Moulthrop, *Victory Garden* 1992

Shelley Jackson, *Patchwork Girl* 1995

Eastgate Systems (fl 1990-97)

Theory

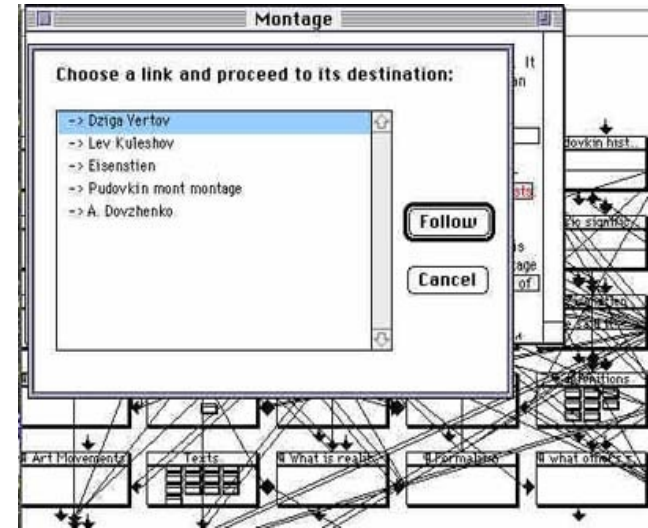
George Landow, *Hypertext* (1992)

Robert Coover “Hypertext is only the beginning” NYT Book Review, 1993

Jay Bolter, co-designer Storyspace

Electronic Literature Organization founded 1999

*In the early 1990s the literary hypertext community deplored the WWW as an inadequate implementation of hypertext and ignored videogames*



# The First Wave: Hypertext/Hypermedia Silo (Wider Distribution)

HyperCard (1987-1998), SuperCard (1989-) community of practice

- Voyager interactive books (1984-1997)
- *A la recontre de Phillippe* interactive video on videodisc ( Yale UP 1993)
- *Myst* (1993) adventure narrative implemented in Hypercard
- *Dans un quartier de Paris* interactive video on cd-rom (Yale UP 1999)

MIT Media Lab founded 1985

Interactive Video part of the establishing demos

Glorianna Davenport Elastic Cinema Group

Word Wide Web (1989-) Mosaic browser (1993)

The Simpsons Archive – first fan site 1994

YouTube (2005; Peabody Award 2008) community of practice

Twine (2009) community of practice

# Acceleration 1992-1997

## University Programs

Joe Bates' Oz Group at CMU (1990)

First IDN course at MIT (1992)

Information Design and Technology MS Georgia Tech (1993)

## Narratives with Mass Appeal

*Myst* (1993) (in Hypercard!)

*Tamagotchi* (1997)

## Authoring Systems

TADS (1988, 1990s) RPG Maker (1992), InForm (1993)

First game mods: *Doom* (1993), *Quake* (1995), *Petz* (1995)

First machinima (1996)

Director v.6 (1997)

Brenda Laurel, *Computer as Theater* (1991) first theory book

## Late 1990s turning point

When 30 years of diverse development began to coalesce into a recognizable new media practice.

- Janet Murray, *Hamlet on the Holodeck* 1997
- Espen Aarseth, *Cybertext* 1997
- Jay Bolter, *Remediation* 1999
- Terry Winograd, *Bringing Design to Software* 1996 (HCI takes off)
- Lev Manovich, *The Language of New Media* 2001
- Nick Montfort, *Twisty Little Passages*, 2003
- Nick Montfort and Noah Waldrip-Fruin, *The New Media Reader* 2003

*First PhD Digital Media, Georgia Tech, 2005*

## Second Wave 2000s

*The Sims (2000)* Simulation game as bildungsroman, genre fiction

*Grand Theft Auto3 (2001)* Open Genre World series

*Second Life (2003)*

*Tell-Tale Games (2004-2018)*

*Façade “interactive drama” (2005)*

*Bioshock (2007)*

## **Conference Organizations**

*ICVS 2001*

*TIDSE 2003*

*DIGRA 2003*

*ICIDS 2008 (incorporating ICVS and TIDSE)*

# Second Wave Examples since 2010

Anna Anthropy, *Dys4ia* (2012)

Molleindustria, *Unmanned* (2012)

Fullbright Company, *Gone Home* (2013)

Emily Short, *Blood and Laurels* (2014)

Lucas Pope, *Papers Please* (2014)

Telltale Games, *Game of Thrones* (2014 - )

Meg Jayanth and Jon Ingold, *80 Days* (2014)

Annapurna Interactive, *Florence* (2018)

**\*\* add your own candidates \*\***

Less successful as interactive stories

Devolver Digital, *Reigns* (2016)

Steven Soderberg, *Mosaic* interactive series (2017)

# The Disciplinary Advantage

Assume that interactive narrative is important as an object of study in *its own right*

- Do not feel the need to validate IDN investigation by embedding it in the discourses of games, legacy narrative forms, legacy critical vocabulary, political ideology, computational virtuosity....

Assume that interaction and procedurality offer new affordances to *expand the expressivity* of stories

- Look for traditions of practice and structural innovations that exploit digital affordances to expand coherence, dramatic impact, complexity



## Disciplinary Advantage: We can avoid pointless conversations

- Are stories bad for games?
- Are games more “real” than stories?
- Are games devoid of cultural/psychological meaning beyond abstract systems?

(the answers are **No, No! No!!**)

but the discourse is not productive for understanding IDN)

Turn the kaleidoscope!

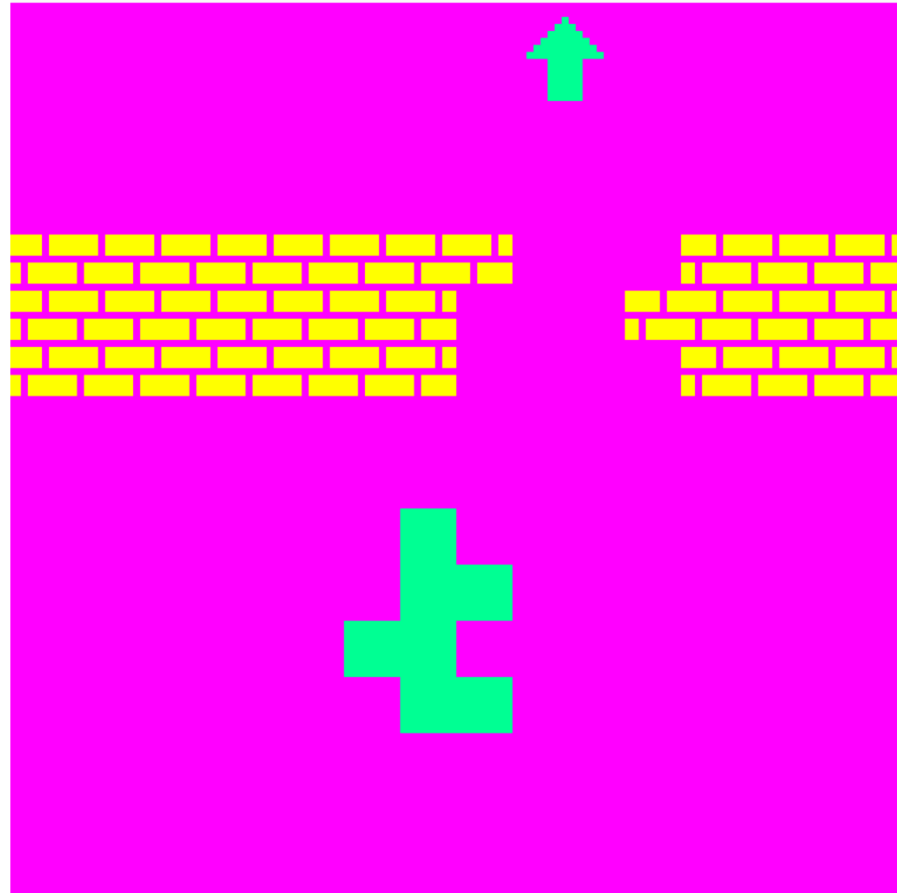
Ask **not** what narrative elements can do for games

**but**

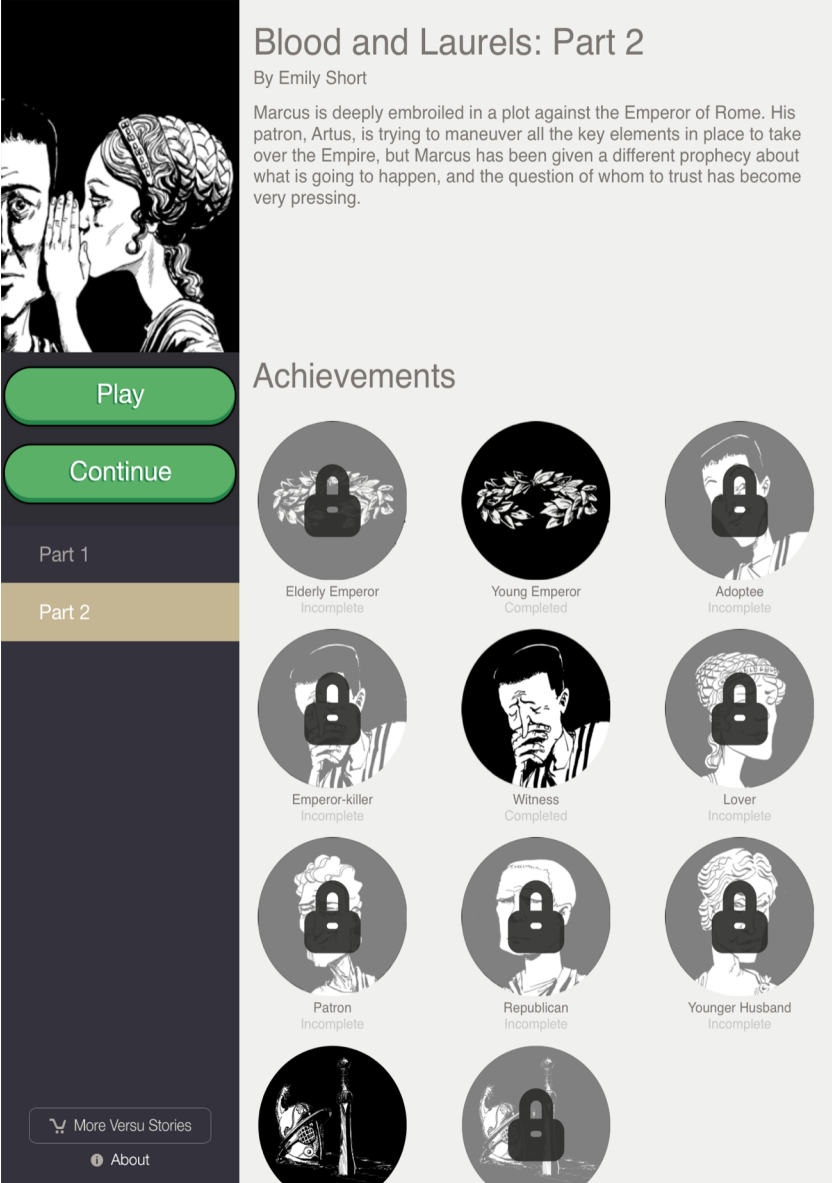
what **interaction mechanics** developed for games

can do for **storytelling**

# Appropriating game mechanics as expressive enactments for an interactive memoir



Adapting achievement badges  
to keep track of multiple versions in a  
well-segmented, multiform story, with  
compelling dramatic variants



**Blood and Laurels: Part 2**  
By Emily Short

Marcus is deeply embroiled in a plot against the Emperor of Rome. His patron, Artus, is trying to maneuver all the key elements in place to take over the Empire, but Marcus has been given a different prophecy about what is going to happen, and the question of whom to trust has become very pressing.

Play  
Continue

Part 1  
Part 2

More Versu Stories  
About

### Achievements

Achievement Name	Status
Elderly Emperor	Incomplete
Young Emperor	Completed
Adoptee	Incomplete
Emperor-killer	Incomplete
Witness	Completed
Lover	Incomplete
Patron	Incomplete
Republican	Incomplete
Younger Husband	Incomplete

# Conventions that work across genres, platforms to create belief: Lock doors to reinforce experience of navigating a space

```
The Troll Room                               Score: 45          Moves: 27

>get sword
Taken.

>open trap door
The door reluctantly opens to reveal a rickety staircase descending into
darkness.

>d
The trap door crashes shut, and you hear someone barring it.

Cellar
Your sword is glowing with a faint blue glow.

>n
The Troll Room
This is a small room with passages to the east and south and a forbidding hole
leading west. Bloodstains and deep scratches (perhaps made by an axe) mar the
walls.
A nasty-looking troll, brandishing a bloody axe, blocks all passages out of
the room.
```

Same strategy works In *Zork* and *Come Home* and VR

# Embedding objects with backstory



Classic game pattern –  
Useful for “Easter eggs,”  
mystery clues and red  
herrings, immersive detail.

Used in set design,  
Promenade Theatre, and  
increasingly in AR, VR



## Disciplinary Advantage: concrete vocabulary

- Not “nonlinear” but multi-sequential and multiform
  - Multi-sequential:** Same events, multiple points of view or orders of discovery or subsets of information
  - Multiform:** Same scenario, multiple variations of events and outcomes
- **Moral physics** makes action coherent and meaningful
- Aesthetic of **Replay** with significant parallels and contrasts
- Aesthetic of **Dramatic Agency**
  - When interaction lines up with dramatic expectations and rewards.
  - Not the same as winning.
  - Not the same as having a direct effect that changes the story.

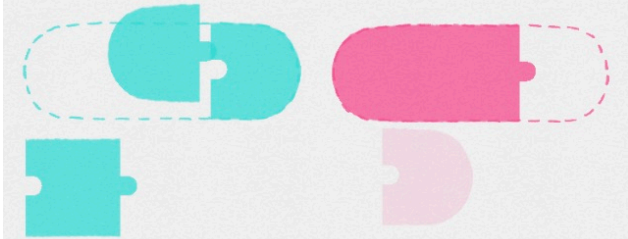
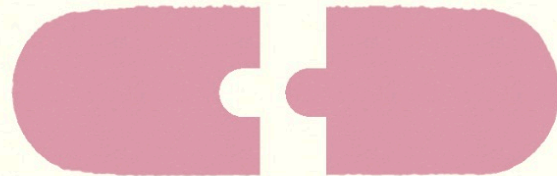
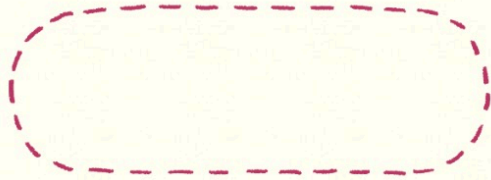
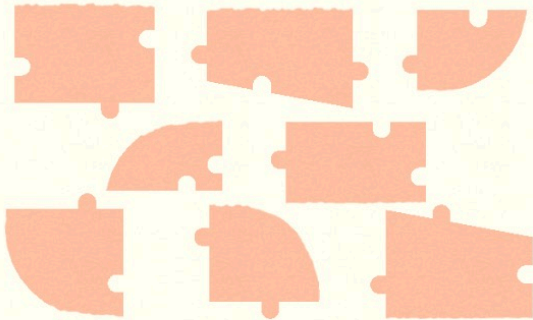
## *Façade* Assessed for Dramatic Agency



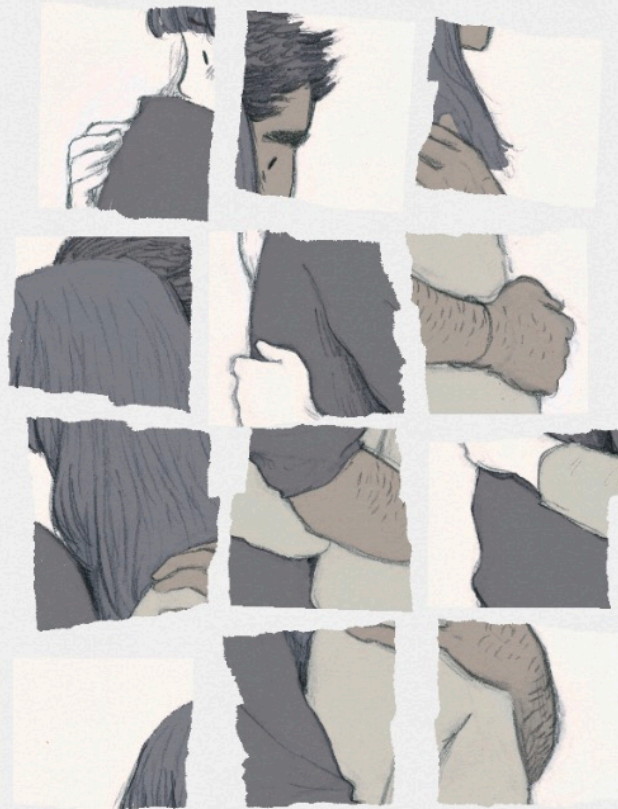
- Segmentation by story beat
- Generation of coherent variation
- Motivation of replay
- Flawed interaction design
  - Expectation setting with free text input
  - Wrongheaded open world aesthetic for conversation



# *Florence* (2018) Dramatic agency through expressive enactment



Jigsaw puzzle  
as metaphor  
for shattered  
relationship





## Dramatic Agency in futile actions

The young heir cannot be saved by your advice (not a strategy game)

Fits the moral physics of the storyworld

Game of Thrones: Ice from Fire Telltale Season 1



## Compare with *Reigns*



Strategy game conventions in this game have strong potential for IDN

But immersion in the story is undermined by lack of dramatic agency:

- little payoff on player choices
- generic actions with no parameterized variation
- no moral physics beyond survival

Good models for interactivity because well segmented, dramatically parallel



Malcolm in the Middle  
“Bowling” Season 2 ep 20



All 7 timelines combined - Community Remedial Chaos Theory

Community  
“Remedial Chaos Theory” S 3 ep 4

## Compare with *Mosaic* (2017)



Storyboard used by developers

Branching interface to  
episode-length segments.  
Poor segmentation.  
Poor motivation for choice.  
No dramatic agency.



# 80 days: post-colonial moral physics and “unfair” gameplay (Meg Jayanth)



*Even better would be game that let us switch POVs*



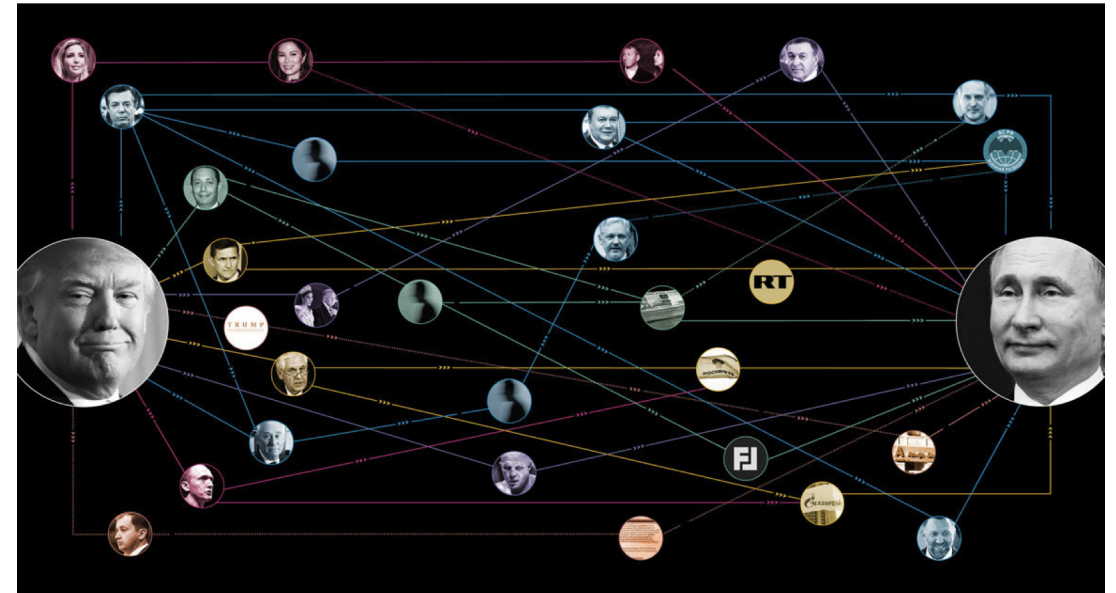
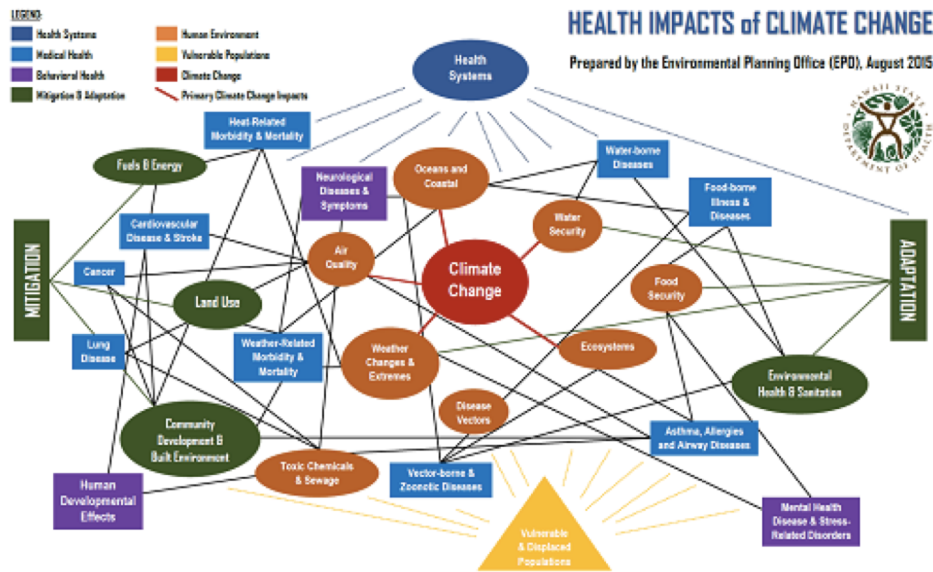


*Even better would be IDN that let us switch POVs*



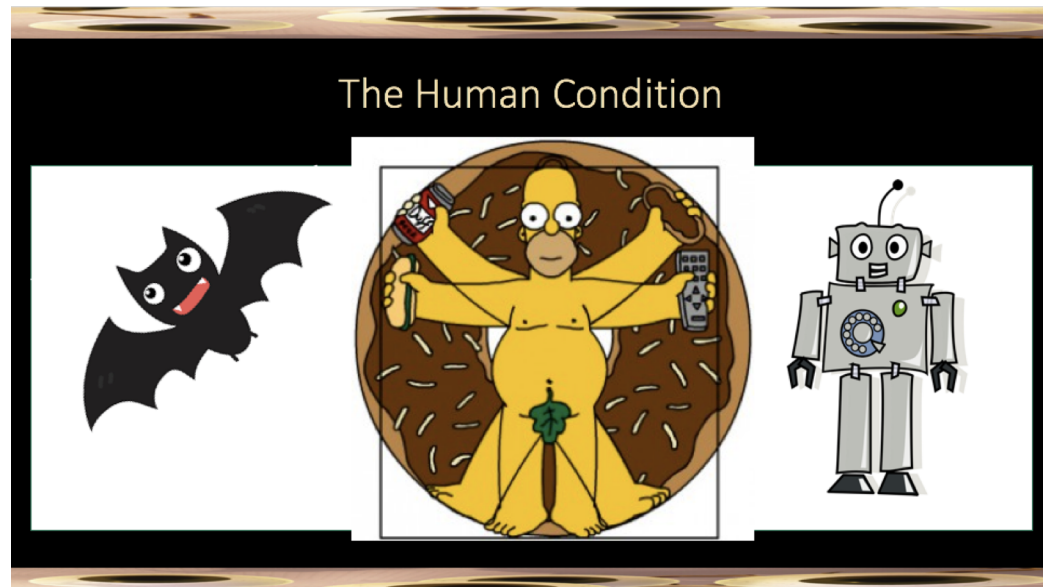
# Disciplinary Advantage

Investigate the potential of IDN as an expressive framework for engaging with the most pressing themes of human culture of the 21st century, and as a cognitive scaffold for increasing our individual and collective understanding of complex systems.



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Ontological Panic of 21<sup>st</sup> Century:  
Mind, Self, Reality

**DRIVE NEW WORLD DEPT. APRIL 2, 2018 ISSUE**

**ARE WE ALREADY LIVING IN VIRTUAL REALITY?**

*A new technology—virtual embodiment—challenges our understanding of who and what we are.*

**PHYSICS**

**Are We Living in a Computer Simulation?**

High-profile physicists and philosophers gathered to debate whether we are real or virtual—and what it means either way

**Innovators\***  
COGNITION

**What Is Consciousness?**

Scientists are beginning to unravel a mystery that has long vexed philosophers

By Christof Koch on June 1, 2018

**SCIENCE**

**The Case Against Reality**

A professor of cognitive science argues that the world is nothing like the one we experience through our senses.

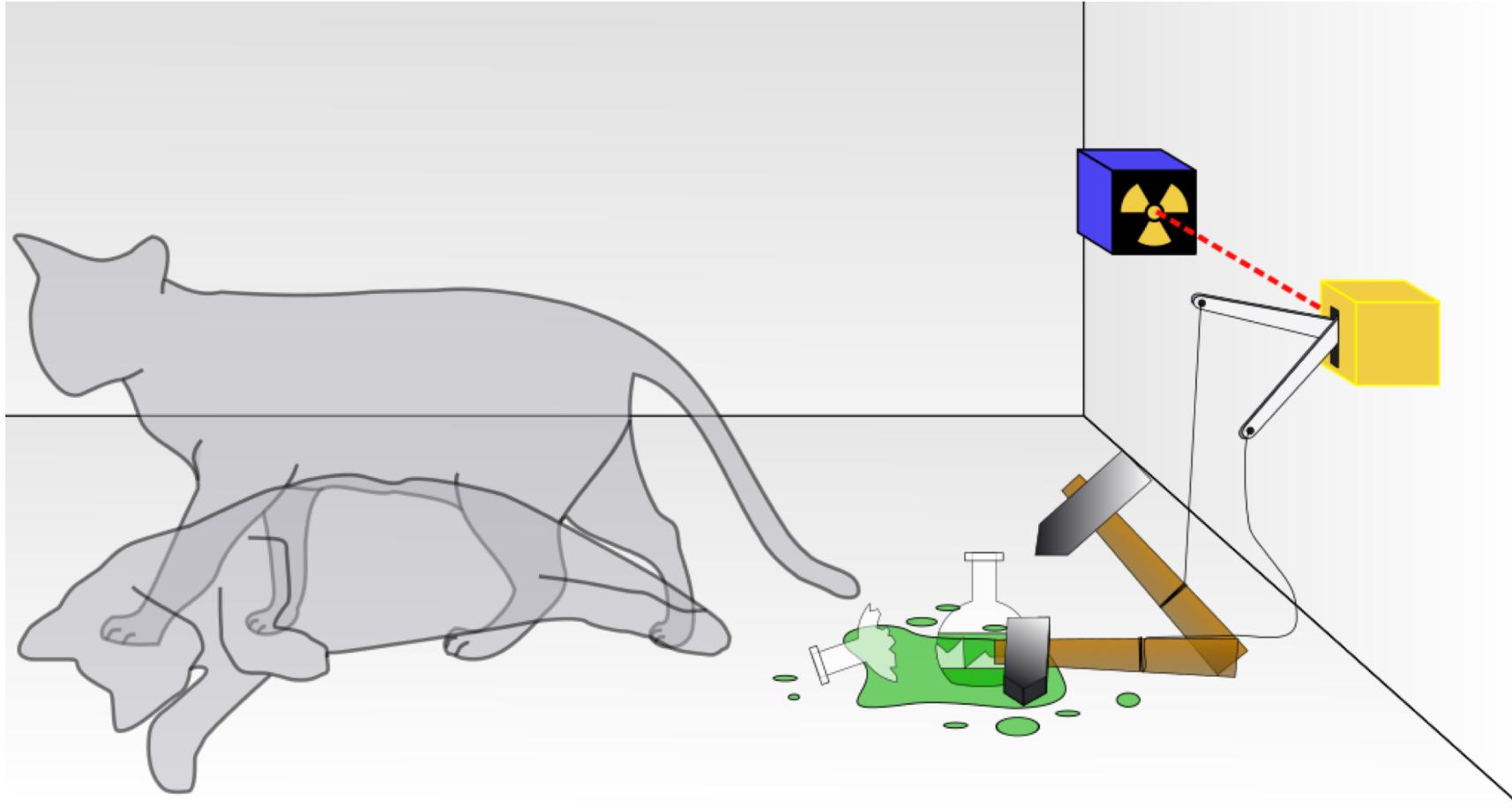
AMANDA GETTER AND QUANTA APR 25, 2016

Live Science > Culture

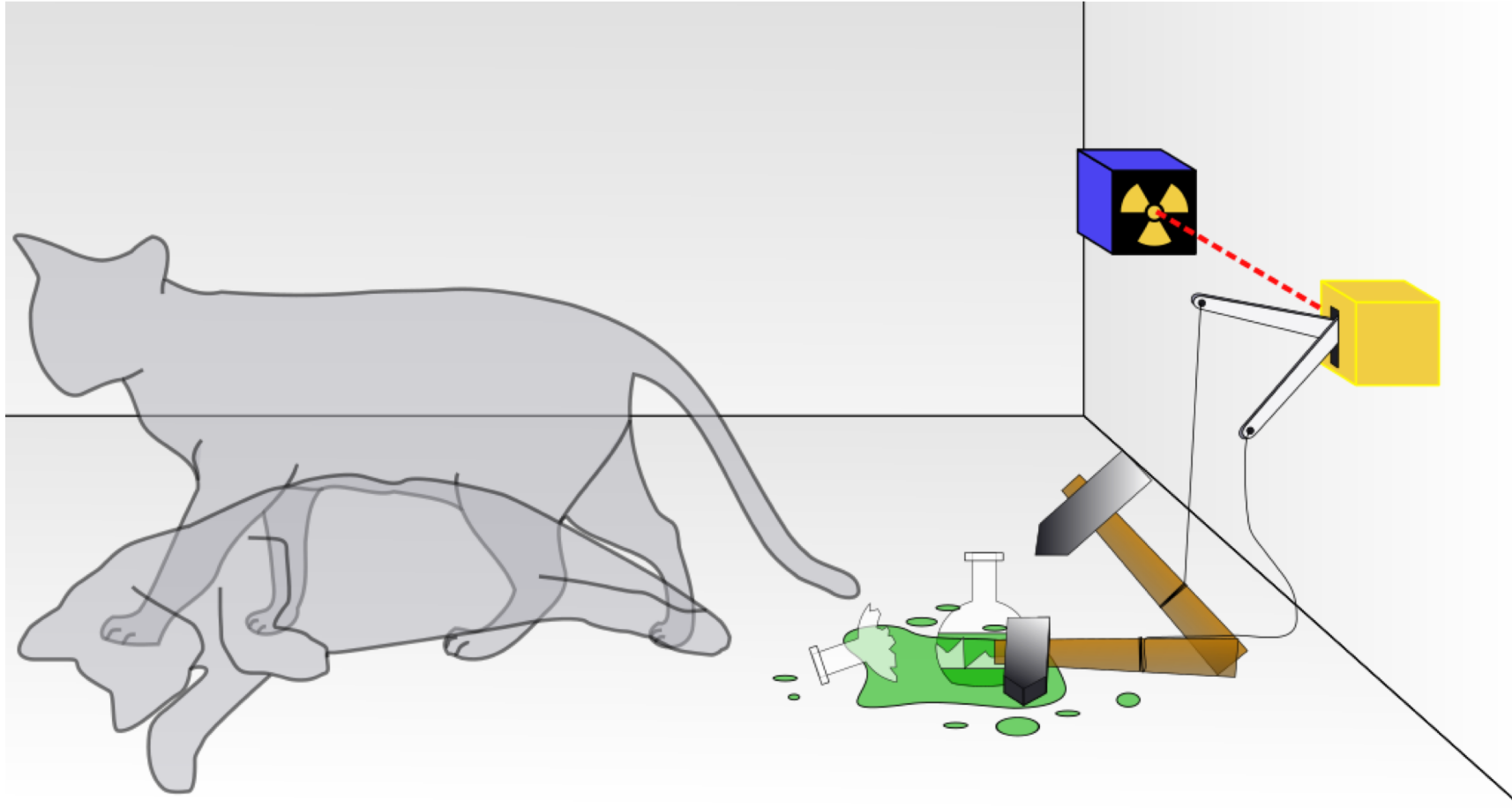
**Is Your 'Self' Just an Illusion?**

By Robert Lawrence Kuhn | September 7, 2016 08:39am ET

# Humanist project of 21<sup>st</sup> Century: Save Shrödinger's Cat



# IDN Research to the rescue....





By allowing us to articulate and share more coherent, kaleidoscopic modes of understanding our multiform reality



*Thank you!*

