What exactly is an "Action-Adventure" game, anyway?: Providing Intelligent Access to Video Games

Jin Ha Lee, Violet Fox, Zach Welhouse,
Chris Magnifico, Michelle Dillon

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How do we **organize** and **describe** these games?

Details Visualization Suggest Terminology

Video games

Broader Terms
> Electronic games

Narrower Terms
> 1080 Degree Snowboarding (Game)
> A-Train (Game)
> Ace Combat (Game)
> Albert Odyssey (Game)
> Alundra (Game)
> Angry Birds (Game)
> Army Men World War (Game)
> Banjo-Kazooie (Game)
> Batman & Robin (Game)
> Battle Arena Toshinden (Game)
> BattleTanx Global Assault (Game)
> Battletoads (Game)
> Beyond the Beyond (Game)
> Blitz: the League (Game)

How **LCSH**
does it

Details

Genre/Form:	Computer war games
	Video games
	Xbox video games
	Computer games
Material Type:	Computer game
Document Type:	Computer File
All Authors / Contributors:	Microsoft Game Studios.; Bungie (Firm)
OCLC Number:	816142886
Notes:	Title from disc label.
	1-4 players; co-op 2-4; system link 2-16 ; online multiplayer 2-16 ; 4 MB to save game; voice.
Target Audience:	ESRB rating: M, Mature 17+ (blood, violence).
Description:	2 computer optical discs : sd., col. ; 4 3/4 in.
Details:	System requirements: XBox 360 with NTSC designation; Xbox 360 requires up to 256 MB for system updates and additional storage for some game features. XBox LIVE System Requirements: In available games, paid subscription required for online multiplayer; some features and downloads require additional storage, hardware, and/or fees.
Other Titles:	Halo4
	Halo four
Responsibility:	Microsoft Game Studios ; Bungie.

Halo 4

WorldCat

Abstract:

The Reclaimer saga begins. Shipwreaked on a mysterious world, the Master Chief returns to battle new enemies, deadly technology, and an ancient evil bent on vengeance and annihilation. The universe will never be the same.

How **the Web** does it

Problem

- Game information on the Web is often unstructured, cumbersome to navigate, unvetted and unverified

- Due to the traditional focus on books, non-book materials often get described primarily by form rather than content

- Traditional library standards have limited applicability

How can we provide more **intelligent access** to **video games?**

Create a **metadata schema** that can capture the **essential** information about games in a **standardized way**

Our approach

Creating Metadata Schema & Encoding Schemes for Video Games (Autumn 2011, 2012)

- **Document-based analysis**: collecting and evaluating metadata elements from various catalogs or game-related websites

- **User-based analysis**:
  – Personas (Player, Parent, Collector, Academic, Game developer/designer, Curator/Librarian)
  – User interviews

CORE16 Version 1.1

- Title
- Edition
- Platform
- Format
- Developer
- Publisher
- Retail release date
- Number of players
- Online capabilities
- Special hardware
- Genre
- Series
- Region
- Rating
- Language
- Identifier

RECOMMENDED Set Version 1.0

- Alternative title
- Franchise/Universe
- Distributor
- System requirements
- Game credits
- Official website
- Price/MSRP
- Controls
- Packaging
- Customization options
- Difficulty levels
- Achievements/Trophies/ Awards
- Box art/cover
- Screenshots
- Trailers

- Gameplay videos
- Style
- Plot/Narrative
- Theme
- Setting
- Mood/Affect
- Temporal aspect
- Presentation
- Point of view
- Character names
- Character types
- Link to historical events
- Type of ending
- Visual style
- Purpose

Genre, Plot, and Visual style

Genre: Let's Break it Down

- Purpose of Game

- Theme

- Type of Ending

- Gameplay: the overall nature of the experience defined by a pattern of interactions and game rules

- Style: a particular distinctive characteristic, mode of action, or manner of a gameplay

Final Fantasy Tactics

- Purpose: Entertainment

- Theme: Fantasy

- Type of Ending: Finite

- Gameplay: RPG

- Style: Strategy RPG

Plants vs. Zombies

- Purpose: Entertainment
- Theme: Nature
- Type of Ending: Finite
- Gameplay: Action
- Style: Tower Defense

Potential Issues

- Lack of Natural Language
  - "But where's my First Person Shooter?"

- Subjectivity
  - "Says who?"

- Time-intensive
  - "Why bother?"

Subject-Action-Object

- Hero Saves Princess

- Based upon observable elements of games, as they relate to the protagonist(s)

- Allows for linking to setting/character tags and plot-specific ones, taken from a controlled vocabulary.

A Peek at the Controlled Vocabulary

	Term	Part of speech (role in triplet phrase)	Definition	Preferred term (see _____)	Equivalent (lead-in) terms	Commonly paired with other terms/words	Associated terms (see also ___)	Broa
1	Term		Definition					
2	Alter	V	Use for when the goal is to actively change something [time, the landscape, etc], not simply travel or explore.		change	*time*		
3	Assist	V		help				
4	Attack	V		battle				
5	Battle	V	Use for situations where destruction or physical defeat of the other party is the goal.		attack, fight, topple	*monsters, robots, ninja*	confront	
6	Break	V		battle ["battle curse," not "break curse"]				
7	Change	V		alter				
8	Compete (with/for)	V		confront				
9	Confront	V	use for situations where destruction of the other party isn't the goal -- inner struggles, debates, negotiations, contests, friendly rivalries, etc		attack, fight, encounter		battle	
10	Conquer	V			encounter, topple			

	Term	Part of speech (role in triplet phrase)	Definition	Preferred term (see _____)	Equivalent (lead-in) terms	Commonly paired with other terms/words	Associated terms (see also ___)	Broa
1	Term		Definition					
80	Magic	O			sorcery, enchantment, witchcraft, psychic power, spiritual energy, mana, metaphysical power			
81	Maturation	O		transform into				
82	Metamorphosis	O		transform into				trans
83	Metaphysical power	O		magic (even though it's a narrower term, it's more common)				
84	*Monsters*	O	[see character list]					
85	Morality	O						
86	Mystery	O						
87	Obliteration	O		disaster				
88	Opponent	O		rival(s)				
89	Order	O			balance, chaos			
90	Peace	O		order				
91	Politics	O		intrigue				
92	Power	O						
93	Psychic Power	O		magic				

- *Portal*
  - Prisoner escapes maze
  - Prisoner battles robots
  - Prisoner solves mystery

- *Batman: Arkham City*
  - Superhero battles opponents
  - Superhero restores order
  - Superhero saves city

- *Persona 3*
  - Teens save world
  - Teens confront self
  - Teens develop social life

Current Limitations

- Subjective
- Plot vs. Mechanics
  - (You) solve puzzles?
- How many plot elements are enough?

FINAL FANTASY III

SQUARE ENIX   NINTENDO DS

Art in an Algorithm

- Methodology
- Style vs. Technique
  - Visual Style vs. Tools
- Purposive vs. limited art
- Recommendation
  - Style/Technique/Dimension triplet

The Controlled Vocabulary

A. Artistic Style
A1. abstract
    A1.1. fractal
      A1.2.1. psychedelic
    A1.2. text
A2. photorealism
    A2.1. illusionism
    A2.2. televisualism
A3. stylized
    A3.1. handicraft
      A3.1.1. clay
      A3.1.2. paper
      A3.1.3. yarn
    A3.2. illustrative
      A3.2.1. caricature
        A3.2.1.1. comic book
          A3.2.1.1.1. American style (comic)
          A3.2.1.1.2. Japanese style (comic)
        A3.2.1.2. Lego
        A3.2.1.3. superflat
      A3.2.2. engraving
      A3.2.3. watercolor
        A3.2.3.1. sumi-e
    A3.3. minimalism
    A3.4. silhouette

B. Artistic Technique
B1. cel-shaded
B2. cutout
B3. full motion video (FMV)
B4. low-poly
B5. pixel art
    B5.1. 16-bit
    B5.2. 8-bit
B6. rasterized
B7. ray traced
B8. rotoscoped
B9. wireframe

C. Artistic Dimension
C1. 2D
C2. 3D
C3. multiple

For Example:

Okami:
sumi-e/cel-shaded/3D

Hotline Miami:
caricature/pixel art/2D

Problems and Limitations

- Characters vs. Environment
  e.g. *Paper Mario*

- Vague language:
  The issue of "low-poly"

- Intent
  e.g. *Flight Simulator 95*

- Isometric projection
  and "real" 3D

Conclusion

Who uses video game information?

- Public libraries: circulation, special events
- Research: subject headings
- Private companies

Future work

- Terminology
- Dealing with change: graphics, companies, digital-born
- From who can we learn?

Thank you!