

Hamlet on The Holodeck~ From Additive to Expressive Form

Notes and Guide for Class Discussion

In 1895 some of the first film storytelling images were projected. The key to this development was seizing on the unique physical properties of film:

- I.) The way the camera could be moved
- II.) The way the lens could open, close, and change focus
- III.) The way the celluloid processed light
- IV.) The way the strips of film could be cut up and reassembled.

By aggressively exploring and exploiting these physical properties, filmmakers changed a mere recording technology into an expressive medium.

1966 Eliza was born by Joseph Weizenbaum, an experiment in natural language processing, a computer program 70 called ELIZA that carried on a conversation by replying to typed-in statements with printed words. The resulting persona, Eliza, was that of a Rogerian therapist, the kind of clinician who echoes back the concerns of the patient without interpretation.

Murray states Digital environments are procedural, participatory, spatial, and encyclopedic. The computer offers us special possibilities for storytelling that are continuous with older traditions but promise new expressive power. The central insight here is that everything made out of bits belongs to a single new medium, with its own affordances that can be used for creating new forms of narrative, just as film was a new medium with its own expressive affordances rather than just an extension of live theater.

The four affordances identified here link to the characteristic pleasures of the medium, interactivity, and immersion.

I.) Procedural Design

II.) Participatory Design

Experience of Agency Interactivity is the vague word we use for two affordances, the shaping of the interactor's behavior and the shaping of the computer's behavior which when well fit together lead to the characteristic pleasure of agency.

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III.) Encyclopedic Extent

IV.) Coherent Spatial Navigation

Immersion When an environment is very deep and detailed, we feel as if we are enclosed by it and it has a special holding power over us as an alternate to the disordered actual world of everyday experience. This is true of noninteractive environments, but it is especially powerful in environments we can navigate through with freedom of action.

1.) Procedural Affordance~ is fundamental to all the others, and the single most-important source of representational power.

a.) ELIZA- Eliza's language processing includes no representation of syntax or meaning. Eliza is not a neutral procedural model but a comic interpretation. Eliza will reflect back any "I am X" statement with a formulation like "Is it because you are X that you came to see me?" The lesson of ELIZA is that the computer can be a compelling medium for storytelling if we can write rules for it that are recognizable as an interpretation of the world.

b.) The Sims game- its open "sandbox" structure has supported a much wider range of make-believe through the inventiveness of its developers in making genre-themed expansion kits and new releases with more detailed goals and personality structures, and, most of all, through the inventiveness of the user community, which immediately created captioned screen shots in story sequences and eventually were given in-game video recorders for creating and sharing their own staged stories.

II.) Participatory Affordance~ is most apparent in the unprecedented growth of social media over the past decade, which has created a continuously updated global forum for sharing media of all forms.

a.) LISP AI language for ELIZA and ZORK- conversational structure between the programmer and the program, a dialogue in which the programmer could test out one function at a time and immediately receive the bafflingly inappropriate or thrillingly correct responses. Zork was set up to provide the player with opportunities for making decisions and to dramatically enact the results of those decisions.

b.) Facebook, Twitter, Social Media Platforms- Real time storytelling, Citizen Journalism, Hashtags and "meme" templates have provided an informational framework by which many people can focus on the same event or social configuration and carry on a many to-many mass-media conversation about an unfolding situation.

III.) Encyclopedic Affordance~ is a feature of most spatial games, enhancing the sense of immersion by the breadth of coverage and granularity of detail, as the emphasis on inexhaustibility in open world games makes clear.

a.) Computers- are the most capacious medium ever invented, promising infinite resources. Because of the efficiency of representing words and numbers in digital form, we can store and retrieve quantities of information far beyond what was possible before.

b.) The Internet- global databases of the Internet, made accessible through a worldwide web of linked computers have made resources exponentially possible.

c.) Lost and House of Cards- Netflix Series were landmark events in the development of encyclopedic storytelling. The cross-platform success of fantasy worlds has also reached a notable peak during this period with the Game of Thrones franchise, whose overpopulated plot sends viewers scrambling to online aids in order to keep track of the story.

IV.) Spatial Affordance~ The creation of 3-D game experiences has been accelerated by the development of authoring environments, allowing self-taught communities of practices to design mods of existing games or new cross-platform games.

a.) Unity- game engine for creating and interacting with 3-D gaming and content

b.) Ingress- Google's multiplayer, augmented reality game uses actual physical landmarks across the globe as the focus of capture-the-flag gameplay, within a loosely detailed story of a battle between an invading super-intelligence and a resistance movement.