

Narrative, Interactivity, Play, and Games: Four naughty concepts in need of discipline

Discipline?

Yes, discipline. On one level, this essay is about identifying a desperate need for discipline and the delivery of that discipline to its well-deserved targets. A kind of disciplinary spanking, if you will.

On another level, this essay is about games and stories. Undoubtedly, there is a tremendous amount of interest in the intersection of games and stories these days. Academic journals, conferences, and courses about computer-based storytelling, digital interactivity, and gaming culture have flourished like a species of virulent weed in the manicured garden of the university. On the commercial end of things, game developers increasingly rely on filmic story techniques in the design of their products, turning present-day computer and video games into a kind of mutant cinema. Meanwhile, shelves of books like this one are being written and published, tossed out like stepping stones into the emerging terrain where design, technology, art, entertainment, and academia meet.

Curiously, so much of this interest is driven by a kind of love/hate relationship with the medium. For as much as we seem enamored by the possibilities of digital media, we seem just as soundly dissatisfied with its current state. Lurking just below the surface of most of the chapters in this volume is one sort of frustration or another: frustration with the lack of cultural sophistication in the gaming industry; frustration with the limitations of current technology; frustration with a lack of critical theory for properly understanding the medium. Perhaps frustration is a necessary part of the process. But perhaps we can relieve some of that frustration with some good old-fashioned discipline.

Looking Closer

Compared to the more robust fields which cluster about the theory and practice of other media, it's clear that the "game-story" as a form remains largely unexplored. Terms and concepts run amuck like naughty schoolchildren. And a more disciplined look would indeed seem to be in order. But what would it mean to take a closer look at games and stories?

Does it mean figuring out how to make games more like stories? Or how to make stories more gamelike? Does it mean documenting and typologizing new forms of game/story culture? Integrating games into learning? Mapping relationships between digital media and other media? Inventing programming strategies for storytelling? Understanding the ways that digital media operate in culture at large? There are as many approaches to the

question of “games and stories” as there are designers, artists, technologists, and academics asking the questions.

The truth, of course, is that there are no right or wrong approaches. It all depends on the field in which a particular inquiry is operating and exactly what the inquiry itself is trying to accomplish. However, there is common ground. What everyone investigating the “game-story” would share are in fact those two strange terms: “games” and “stories.”

Concepts and terms do seem to be at the heart of the matter. This essay tackles the terminological knot of the “game-story” by prying apart and recombining the two concepts into four: *narrative*, *interactivity*, *play*, and *games*. Each concept is considered in relationship each other as well as to the larger question of “games and stories.” My goal is to frame these concepts in ways that bring insight to their interrelations, with the larger aim of providing critical tools for others who are attempting to create or study the conundrum of the game-story.

Four naughty terms

Play. Games. Narrative. Interactivity. What a motley bunch. Honestly, have you ever seen such a suspicious set of slippery and ambiguous, overused and ill-defined terms? Indeed, they are all four in need of some discipline, just to make them sit still and behave. Before I roll up my sleeves and get to work on them, however, allow me to lay some of my cards on the table, in the form of a series of disclaimers.

Disclaimer 1: concepts, not categories

In presenting these four terms (games, play, narrative, and interactivity), I’m not creating a typology. The four terms are not mutually exclusive, nor do they represent four categories, with each category containing a different kind of phenomena. They are four concepts, each concept overlapping and intersecting the others in complex and unique ways. In other words, the four words are not the four quadrants of a grid or the four levels of a building. They are “things to think with;” they are signs for clusters of concepts; they are frames and schemas for understanding; they are dynamic conceptual tools; they represent a network of ideas that flow into and through each other.

Disclaimer 2: forget the computer

While digital media is certainly a primary vector in the momentum of interest which has led to this book, the phenomena we call games and stories – as well as play, narrative, and interactivity – predate computers by millennia. Computer media is one context for understanding them, but I’m going to try and avoid typical technological myopia by examining these concepts in a broad spectrum of digital and non-digital manifestations.

Disclaimer 3: defining definitions

For each of the four key terms, I do present a “definition.” The value of a definition in this essay is not its scientific accuracy but instead its conceptual utility. I give definitions not in order to explain phenomena, but in order to understand them.

Disclaimer 4: why I'm doing this

Why does it matter to me to better understand “games and stories?” Because I’m a designer of game-stories, and a closet Modernist to boot. I’m looking to better understand the medium in which I work, in order to create new and meaningful things which no one has ever experienced before. It’s certainly not the only kind of stance to take. But now you know where I’m coming from.

Narrative

First term: *narrative*. I’m going to begin with this close cousin to the “stories” of the “games and stories” equation. My strategy of discipline for the term *narrative* is to present a broad and expansive understanding of the concept, to think beyond the normal limits of what we might consider narrative, to help uncover the common turf of stories and games.

The definition: I draw my definition from an essay by J. Hillis Miller: *Narrative*, from the book *Critical Terms for Literary Study* (19**). Miller’s definition of the term “narrative,” grossly paraphrased, has three parts:

- 1) A narrative has an initial state, a change in that state, and insight brought about by that change. You might call this process the “events” of a narrative.
- 2) A narrative is not merely a series of events, but a personification of events through a medium such as language. This component of the definition references the representational aspect of narrative.
- 3) And lastly, this representation is constituted by patterning and repetition. This is true for every level of a narrative, whether it is the material form of the narrative itself or its conceptual thematics.

It’s quite a general definition. Let’s see what might be considered narrative according to these three criteria. A book is certainly a narrative by this definition, whether it is a straightforward linear novel or a choose-your-own-adventure interactive book, in which each page ends with a choice that can bring the reader to different sections of the book. Both kinds of books contain events which are represented through text and through the patterned experience of the book and its language.

A game of Chess could also be considered a narrative by this scheme. How? Chess certainly has a beginning state (the setup of the game), changes to that state (the gameplay), and a resulting insight (the outcome of the game). It is a representation – a stylized representation of war, complete with a cast of colorful characters. And the game takes place in highly patterned structures of time (turns), and space (the checkerboard grid).

Many other kinds of things fall into the wide net Miller casts as well – some of them activities or objects we wouldn’t normally think of as narrative. A marriage ceremony.

A meal. A conversation. The cleverness of Miller's definition is that it is in fact so inclusive, while still rigorously defining exactly what a narrative is.

Because, what I wish to ask is NOT the overused question:

Is this thing (such as a game) a "narrative thing" or not?

Instead, the question I'd like to pose is:

In what ways might we consider this thing (such as a game) a "narrative thing?"

What am I after? If I'm intersecting games and stories to create something new out of the synthesis of both, my aim with the concept of narrative should not be to replicate existing narrative forms but to invent new ones. The commercial game industry is suffering from a peculiar case of cinema envy at the moment, trying to recreate the pleasures of another media. What would a game-story be like that wouldn't be so beholden to pre-existing linear media? Good question. But I'm getting ahead of myself. We're still two full terms away from games. Next victim: interactivity.

Interactivity

Interactivity is one of those words which can mean everything and nothing at once. So in corralling this naughty concept, my aim is to try and understand it in its most general sense, but also identify those very particular aspects of interactivity which are relevant to "games and stories."

The definition: Try this on for size. It's from dictionary.com:

interactive: reciprocally active; acting upon or influencing each other; allowing a two-way flow of information between a device and a user, responding to the user's input

OK. So there's an adequate common-sense definition. But if we're triangulating our concept of narrative with this concept of interactivity, the problem is that by this definition all forms of narrative end up being interactive. For example, take this book you're holding. Can you really say that the experience of reading it isn't interactive? Aren't you holding the book and physically turning the pages? Aren't you emotionally and psychologically immersed? Aren't you cognitively engaging with language itself to decode the signs of the text? And doesn't the physical form of the book and your understanding of its contents evolve as you interact with it? Yes and no.

If what we're after is relationships between our terms, it's important to find the terrain of overlap between narrative and interactivity. But we don't want the two terms to be identical. It seems important to be able to say that some narratives are interactive and

some are not – or rather, that perhaps all narratives can be interactive, but they can be interactive in different ways.

Intuitively, there is in fact some kind of difference between a typical linear book and a choose-your-own-adventure book. And it seems that the difference in some way is that naughty concept of interactivity. Here's one solution. Instead of understanding "interactivity" as a singular phenomenon, let's subdivide it into the various ways it can be paired up with a narrative experience. So here are four modes of narrative interactivity:

Mode 1: Cognitive interactivity; or interpretive participation with a text

This is the psychological, emotional, hermeneutic, semiotic, reader-response, Rashomon-effect-ish, etc. kind of interactions that a participant can have with the so-called "content" of a text. Example: you re-read a book after several years have passed and you find it's completely different than the book you remember.

Mode 2: Functional interactivity; or utilitarian participation with a text

Included here: functional, structural interactions with the material textual apparatus. That book you re-read: did it have a table of contents? An index? What was the graphic design of the pages? How thick was the paper stock? How large was the book? How heavy? All of these characteristics are part of the total experience of reading interaction.

Mode 3: Explicit interactivity; or participation with designed choices and procedures in a text

This is "interaction" in the obvious sense of the word: overt participation like clicking the non-linear links of a hypertext novel, following the rules of a Surrealist language game, rearranging the clothing on a set of paper dolls. Included here: choices, random events, dynamic simulations, and other procedures programmed into the interactive experience.

Mode 4: Meta-interactivity or cultural participation with a text

This is interaction outside the experience of a single text. The clearest examples come from fan culture, in which readers appropriate, deconstruct, and reconstruct linear media, participating in and propagating massive communal narrative worlds.

These four modes of narrative interactivity (cognitive, functional, explicit, and cultural) are not four distinct categories, but four overlapping flavors of participation that occur in varying degrees in all media experience. Most interactive activities incorporate some or all of them simultaneously.

So what we normally think of as "interactive," what separates the book from the choose-your-own-adventure, is category number three, explicit interactivity. As we hone in on our four terms, note that we've made enough progress to already identify those phenomena we might call "interactive narratives." The newspaper as a whole is not explicitly interactive, but the letters-to-the-editor section is. Are games interactive narratives in this sense? Absolutely. The choices and decisions which game players make certainly constitute very explicit interactivity. We're getting closer to games. But first: play.

Play

Perhaps more than any other one of the four concepts, *play* is used in so many contexts and in so many different ways that it's going to be a real struggle to make it play nice with our other terms. We play games. We play with toys. We play musical instruments and we play the radio. We can make a play on words, be playful during sex, or simply be in a playful state of mind.

What do all of those meanings have to do with narrative and interactivity? Before jumping into a definition of play, first let's try and categorize all of these diverse play phenomena. We can put them into three general categories.

Category 1: Game Play, or the formal play of games

This is the focused kind of play that occurs when one or more players plays a game, whether it is a board game, card game, sport, computer game, etc. What exactly is a game? We're getting to that soon.

Category 2: Ludic activities, or informal play

This category includes all of those non-game behaviors that we also think of as "playing:" dogs chasing each other, two college students tossing a frisbee back and forth, a circle of children playing ring-around-the-rosy, etc. Ludic activities are quite similar to games, but generally less formalized.

Category 3: Being playful, or being in a play state of mind

This broad category includes all of the ways we can "be playful" in the context of other activities. Being in a play state of mind does not necessarily mean that you are playing – but rather that you are injecting a spirit of play into some other action. For example, it is one thing to insult a friend's appearance, but it is another thing entirely if the insult is delivered playfully.

Quick structural note: the later categories contain the earlier ones. Game play (1) is a particular kind of ludic activity (2) and ludic activities (2) are a particular way of being playful (3). But what overarching definition could we possibly give to the word "play" which would address all of these uses?

The definition: How about:

Play is the free space of movement within a more rigid structure. Play exists both because of and also despite the more rigid structures of a system.

That sounds quite abstract and obtuse for a fun-loving word like "play," doesn't it? But it is actually quite handy. This definition of play is about relationships between the elements of a system. Think about the use of the word "play" when we talk about the "free play" of a steering wheel. The free play is the amount of movement that the

steering wheel can turn before it begins to affect the tires of the car. The play itself exists only because of the more utilitarian structures of the driving–system: the drive shaft, axles, wheels, etc.

But even though the play only occurs because of these structures, the play is also exactly that thing which exists despite the system, the free movement within it, in the interstitial spaces between and among its components. Play exists in opposition to the structures it inhabits, at odds with the utilitarian functioning of the system. Yet play is at the same time an expression of a system, and intrinsically a part of it.

This definition of play does in fact cover all three kinds which we mentioned above. Playing Chutes and Ladders occurs only because of the rigid rules of the game – but the gameplay itself is a kind of dance of fate which occurs somewhere among the dice, pieces, board, and game players. Playing a musical instrument means manipulating within the free space of audio possibilities that the structure of the instrument was designed to engender. Being playful in a conversation means playing in and among the linguistic and social structures that constitute the conversational context. Play can manifest in a dizzying variety of forms, from intellectual and physical play to semiotic and cultural play.

One way to link this understanding of play to narrative and interactivity is to consider the play of an explicitly interactive narrative. The challenge for the creator of an interactive narrative is to design the potential for play into the structure of the experience, whether that experience is a physical object, a computer program, an inhabited space, or a set of behaviors.

And the real trick is that the designed structure can guide and engender play, but never completely script it in advance. If the interaction is completely pre-determined, there's no room for play in the system. The author of a choose-your-own-adventure creates the structure that the reader inhabits, but the play emerges out of that system as the reader navigates through it. Even if the reader breaks the structure by cheating and skipping ahead, that is merely another form of play within the designed system.

Games

We have arrived at our fourth and final term: *games*. With this concept, we have a new kind of naughtiness. Play, interactivity, and narrative threatened us with over-inclusion. “Games,” on the other hand, needs some discipline because it's difficult to understand exactly and precisely what a game is. My approach with this concept is to define it as narrowly as possible so that we can understand what separates the play of games from other kinds of ludic activities. We are, after all, looking at *games* and stories, not *play* and stories.

The definition: The fact that games are a formal kind of play was referenced above. But how exactly is that formality manifest? Here is a definition that separates games from other forms of play:

A game is a voluntary interactive activity, in which one or more players follow rules that constrain their behavior, enacting an artificial conflict that ends in a quantifiable outcome.

It is a bit dense. Here are the primary elements of the definition, teased out for your perusal:

voluntary

If you're forced against your will to play a game, you're not really playing. Games are voluntary activities.

interactive

Remember this word? It's referencing our third mode of interactivity: explicit participation.

behavior constraining rules

All games have rules. These rules provide the structure out of which the play emerges. It's also important to realize that rules are essentially restrictive and limit what the player can do.

artificiality

Games maintain a boundary from so-called "real life" in both time and space. While games obviously do occur within the real world, artificiality is one of their defining features. Consider, for example, the formal limits of time and space which are necessary to define even a casual game of street hoops.

conflict

All games embody a contest of powers. It might be a conflict between two players as in Chess; it might be a contest between several teams, as in a track meet; a game might be a conflict between a single player and the forces of luck and skill embodied in solitaire; or even a group of players competing together against the clock on a game show.

quantifiable outcome

The conflict of a game has an end result, and this is the quantifiable outcome. At the conclusion of a game, the participants either won or lost (they might all win or lose together) or they received a numerical score, as in a videogame. This idea of a quantifiable outcome is what often distinguishes a bona-fide game from other less formal play activities.

Games embody the same structure-play relationship of other ludic activities, where play emerges as the free space of movement within more rigid structures. But the fact that

games are so formalized gives them a special status in this regard. To create a game is to design a set of game rules – as well as game materials, which are an extension of the rules.

The rules of a game serve to limit players' behaviors. In a game of Parcheesi, for example, players interact with the dice in extremely particular ways. You don't eat them, hide them from other players, or make jewelry out of them. When it is your turn, you roll the dice, and translate the numerical results into the movement of your pieces. To take part in a game is to submit your behavior to the restrictions of the rules.

Rules might not seem like much fun. But once players set the system of a game into motion, play emerges. And play is the opposite of rules. Rules are fixed, rigid, closed, and unambiguous. Play, on the other hand, is uncertain, creative, improvisational, and open-ended. The strange coupling of rules and play is one of the fascinating paradoxes of games.

Mixing and Matching

We've arrived at a relatively clear understanding of exactly what constitutes a game. So how do games intersect with the other three concepts at hand?

Narrative: As we observed with Chess, Games are in fact narrative systems. They aren't the only form that narrative can take, but every game can be considered a narrative system.

Interactivity: Games are interactive too. They generally embody all four modes of interactivity outlined in this essay, but they are particularly good examples of the third kind: explicit interactivity.

Play: Games are among the many and diverse forms of play. The formal quality of games distinguishes them from other ludic play-activities.

What does this mean? It is possible to frame games as narrative systems, or as interactive systems, or as systems of play. While this seems like an obvious set of conclusions to draw, remember that the goal wasn't to place the concept of games inside some categories and keep it out of others. Armed with very particular understandings of narrative, play, and interactivity, these three concepts become frames or schemas that we can use to tease out particular qualities of the complex phenomena of games.

And it goes without saying that there are innumerable other terms we might bring to bear on the concept of games as well: games as mathematical systems, ideological systems, semiotic systems, systems of desire. It's an endless list. I chose play, narrative, and interactivity in order to shed light on the game-story. So let's get back to that important question.

Stories & Games

So. We've disciplined our four naughty terms until they've finally behaved and we've come full circle, back to the original question of games and stories. This essay began by observing a general dissatisfaction with the current state of game-story theory and practice. Perhaps it can end with some suggestions for future work.

A story is the experience of a narrative. And the dissatisfaction with game-stories is a dissatisfaction with the way that games function as storytelling systems. Remembering the concept of narrative, story-systems function by representing changes of events through pattern and repetition. This act of representation – or, we might say, signification – is how narrative operates.

So one relevant question to ask is: How can games represent narrative meaning? Or rather: How can games signify? Remember, it's not a question of whether or not games are narrative, but instead *how* they are narrative. And if my agenda with this investigation of the “game-story” is to inculcate genuinely new forms of experience, then we need to ask not just how games can be narrative systems, but we need to ask how games can be narrative systems in ways that other media cannot.

It's clear that games can signify in ways that other narrative forms have already established: through sound and image, material and text, representations of movement and space. But perhaps there are ways that *only* games can signify, drawing on their unique status as explicitly interactive narrative systems of formal play.

Example: Ms. Pac-Man

This much we know: one way of framing games is to frame them as game-stories. So let's take a well-known example – the arcade game Ms. Pac Man – and look closely at the diverse ways that it signifies narrative.

First observation: there are many story elements to Ms. Pac-Man which are not directly related to the gameplay. For instance, the large-scale characters on the physical arcade game cabinet establish a graphical story about the chase between Ms. Pac-Man and the ghosts. There are also brief non-interactive animations inside the game, which appear between every few levels. These simple cartoons chronicle events in the life of Ms. Pac-Man: meeting her beau Pac-Man, outwitting the ever-pursuing ghosts, etc.

But while these story-components are important parts of the larger Ms. Pac-Man experience, they are not at the heart of what distinguishes Ms. Pac-Man as a *game-story*. The arcade cabinet graphics and linear cartoon animations sit adjacent to the actual gameplay itself, where a different kind of narrative awaits. As the player participates with the system, playing the game, exploring its rule-structures, finding the patterns of free play which will let the game continue, a narrative unfolds in real time.

What kind of story is it? It's a narrative about life and death, about consumption and power. It's a narrative about strategic pursuit through a constrained space, about dramatic reversals of fortune where the hunter becomes the hunted. It's a narrative about relationships, in which every character on the screen, every munchable dot and empty corridor, are meaningful parts of a larger system. It's a narrative that always has the same elements, yet unfolds differently each time it is experienced. And it's also a kind of journey, where the player and protagonist are mapped onto each other in complicated and subtle ways. This is a narrative in which procedures, relationships, and complex systems dynamically signify. It is the kind of narrative which only a game could tell.

Quick reminder: although I may have focused on the gameplay elements of the Ms. Pac-Man narrative, ultimately the player's experience of the game-story is composed of the entire arcade game. This includes not just the gameplay itself but the cabinet graphics and the cartoon animations, the sound of a quarter dropping and the texture of the joystick, the social and architectural dynamics of the arcade itself, the gender ideologies of the game and its historical relationship to the original Pac-Man, the marketing of the character and its penetration into pop culture at large.

But at the center of this expansive game experience is the *game* of Ms. Pac-Man – that artificial conflict with a quantifiable outcome. The gameplay of Ms. Pac-Man is in some sense the kernel at the center of the machine, the engine which drives all of the other elements, putting the *game* in the game-story.

And as a story, it is compelling enough to have found Ms. Pac-Man a worldwide audience of dedicated players. It's important to note that the "story" of the Ms. Pac-Man game-story certainly does not provide the same pleasures of a novel or film. But why should we expect it to? The question is, what pleasures can it provide that books or film cannot?

Wrap-up & Send-off

Because games are always already narrative systems, the question which frames this section of the book, the question "Is there a game-story" is ultimately moot. Recognizing that narrative is one of many ways to frame a game experience, for me a more important question is: How can we capitalize on the unique qualities of games in order to create new kinds of game-stories? What if dynamic play procedures were used as the very building-blocks of storytelling?

There are already many wonderful examples of this kind of thinking. The children's board game *Up the River* by Ravensburger uses a modular game board to procedurally recreate the rhythmic flow of a stream. And *The Sims*, a computer game mentioned often in this volume, is a game-story too. Instead of presenting a pre-scripted narrative like most digital "interactive narratives," *The Sims* functions like a kind of story-machine, generating unexpected narrative events out of complex and playful simulation.

But much more needs to be done. Any observation made about games, play, narrative and interactivity could be used as the starting point for a new kind of game-story. Here are some examples that cannibalize statements I made earlier in this essay:

The concept of “narrative” casts a wide net. Many experiences can be considered narrative experiences, like a meal or a marriage ceremony. How would we make a game-story about these kinds of subjects?

Interactivity can occur on a cultural level. How could game-story be designed with meta-interactivity in mind, so that the narrative emerged as the sum of many different player experiences in otherwise unrelated games?

Mischief is a form of play. What would a game be like that encouraged players to break the existing rules in order to form new ones?

Games are about conflict. OK, so we’re drowning in fighting games. What about a game that told a story of the feints, bluffing, trickery, and intimidation of a good argument?

Yes, these are difficult kinds of challenges. But if we’re going to move through our collective dissatisfaction with the current state of the game-story, it’s time to re-think the terms of the debate and arrive at new ways of understanding game-stories, and new strategies for creating them.

This essay attempted to re-present some of those terms. In this painfully brief space, I have been able to do no more than gesture towards some of these new avenues. There are many more concepts in need of discipline. And the rest is up to you.

Endnotes

Many of the ideas in this essay were generated in collaboration with Frank Lantz, with whom I have taught Game Design and Interactive Narrative Design for many years. Many ideas also stem from my collaborations with Katie Salen, with whom I am currently co-authoring a Game Design textbook for MIT Press.

The four categories of Narrative Interactivity first appeared in print in an essay called *Against Hypertext* for *American Letters & Commentary*, Issue 12, 2000.

The definition of games presented here is loosely inspired by a definition of games presented by Elliott Avedon & Brian Sutton-Smith in *The Study of Games* (New York: John Wiley & Sons, Inc, 1971). However, elements are also borrowed from Roger Callois’ *Man, Play, and Games* (New York: The Free Press, 1961) as well as Johannes

Huizinga's *Homo Ludens: A Study of the Play Element in Culture* (Boston: Beacon Press, 1955) and Bernard Suit's *Grasshopper: Games, Life, and Utopia* (Boston: David R. Godine, 1990).

Lastly: Despite my extensive and gratuitous use of the disciplinary metaphor, I do not advocate spanking children in any context. Disciplinary activity that occurs between two consenting adults is another matter entirely. In any case don't let the bad pun distract you - the "discipline" I am talking about in this essay is *a* discipline: the field of game design.