

Can There Be a Form between a Game and a Story?

Ken Perlin

Why does a character in a book or movie seem more "real" to us than a character in a computer game? And what would it take to make an interactive character on our computer screen seem real to us the way that a character on the page or silver screen does? In other words, is there something intermediate between a story character and a game character? As I write this I'm looking at my computer screen, where an interactively animated character that I've created appears to be looking back at me. In what sense can that character be considered "real"? Obviously it's all relative; there's no actual person in my computer, any more than a character in a movie is an actual person. We're talking about a test of "dramatic" reality. But what sort of dramatic reality?

If I'm seeing a movie and the protagonist gets hurt, I feel bad because I've grown to identify with that character. The filmmakers have (with my consent) manipulated my emotions so as to make me view the

world from that character's point of view for 100 minutes or so. I implicitly consent to this transference process; I "willingly suspend my disbelief." As I watch the movie, I am continually testing the protagonist's apparent inner moral choices against my own inner moral measuring stick, looking for affirmation of higher goals and ideals, or for betrayal of those ideals. That transference is why a character such as Tony Soprano, for example, is so gripping: the narrative and point of view lead us forcefully into his vulnerable inner landscape, into the way, for example, that he finds connection with his own need for family by nurturing a family of wild ducklings. And then we are led to scenes of him being a brutal mob boss, hurting or maiming adversaries who get in his way. The power of the work lies in pulling us into the point of view of a character who makes moral choices wildly at odds with the choices that most of us would make. In some strange sense we "become" Tony Soprano for a time, a very novel and unsettling experience for most of us.

This transference can be effected in such a focused and powerful way only because we agree (when we start watching) to give over our choice-making power, and to passively allow the narrative to lead us where it will. When this is done well, then we are drawn inside the head of one character (or in some cases several characters). In that mode we are taken to places that we

Response by Will Wright

Ken Perlin raises some very good points in his article. I think the question of "agency" is particularly relevant (who's in control) but first I would like to step back a bit and look at a somewhat larger view.

Since the dawn of computer games (a mere 20 years ago) there has always been this underlying assumption that they would one day merge somehow with the more predominant media forms (books, movies, TV). A strong, compelling (but still interactive) story seems to be the thing that people feel is missing from games. I agree that the believable, virtual actors that Ken envisions would be a major step towards this goal.

However, I've always had a hard time accepting the idea that games should aspire to tell better stories.

There seems to be this expectation that new media forms will evolve smoothly from older forms (Books → Radio → Movies → TV) and then go on to find their niche. The jump from linear media to nonlinear is in many ways a much more fundamental shift, though.

From a design viewpoint the dramatic arc (and its associated character development) is the central scaffolding around which story is built. The characters that we become immersed in as an audience are inextricably moving through a linear sequence of events that are designed to evoke maximum emotional involvement. Everything else (setting, mood, world) is free to be molded around this scaffolding. They are subservient to it. The story is free to dictate the design of the world in which it occurs.

might never reach in our actual lives.

The form I have just described, of course, arises from what I will call "The Novel," which has for some time been the dominant literary form of Western civilization. Whether it is in the form of oral storytelling, written text, dramatic staging, or cinema, the basic premise is the same. A trusted storyteller says to us, "Let me tell you a story. There was a guy (or gal), and one day the following conflict happened, and then this other thing happened, and then. . .," and by some transference process we become that guy or gal for the duration of the story. His conflict becomes our conflict, his choices our choices, and his fictional changes of character seem, oddly, like a sort of personal journey for our own souls. My focus here will be more on those variants of the novel in which the narrative is literally played out by embodied actors, such as staged theater, cinema and figurative animation, because those are the narrative media with the closest connection to modern computer games.

There's an odd sort of alchemy at work in the way that the transference process by which viewer identifies with the protagonist succeeds precisely because it is not literal. For example, imagine a novel in which countless millions of innocent people die a senseless and brutal death, with much of the world's population being wiped out, yet in which the protagonists, when faced with

difficult moral choices, acquit themselves admirably and stay true to their ideals. This will probably result in an uplifting story. (This is precisely the recipe, for example, of the films *When Worlds Collide* and *Independence Day*.) In such a story, the protagonist doesn't even need to survive — as long as he dies nobly, exiting with a suitably stirring speech on his tongue or a grim gleam of stoic heroism in his steely eye.

On the other hand, imagine another novel in which nobody is killed or even hurt, but in which the sympathetic protagonist betrays his inner ideals. This is inevitably a tragic tale, and reading or viewing it will fill us with despair. *The Bicycle Thief* is a classic example.

Note that there are certainly other art forms that convey personality, soul, and character without following the paradigm of linear narrative. Figurative sculpture, for example, does not impose a narrative on us, although it certainly can transport us to a different emotional state or psychological point of view. There is no fixed viewpoint from which we are expected to look at a sculpture. There isn't even a recommended sequence of successive viewpoints. And yet sculpture, without narrative, can powerfully convey emotions, personality, struggle.

So, there is something very particular about the way the novel, in all its many variants, goes about its business. By telling us a story, it asks us to set aside

A game is structured quite differently. The paramount constructs here are the constraints on the player. As a game designer I try to envision an interesting landscape of possibilities to drop the player into and then design the constraints of the world to keep them there. Within this space the landscape of possibilities (and challenges) need to be interesting, varied, and plausible (imagine a well-crafted botanical garden). It is within this defined space that the player will move, and hence define *their own* story arc.

My aspirations for this new form are not about telling better stories but about allowing players to "play" better stories within these artificial worlds. The role of the designer becomes trying to best leverage the agency of the player in finding dramatic and

interesting paths through this space. Likewise, I think that placing character design and development in the player's hands rather than the designer's will lead to a much richer future for this new medium.

Back to Ken's points, I do agree that there is a strong linkage between the believability of the characters and the dramatic potential of the work. This has been perhaps the most technically limiting factor to dramatic game design. In *The Sims* we fell back on abstraction to address this issue. By purposely making the Sims fairly low-detail and keeping a certain distance from them we forced the players to fill in the representational blanks with their imaginations (an amazingly effective process which is well-covered in Scott McCloud's (1993) *Understanding Comics*).



2.sidebar.1. A promotional image of Lara Croft. (Eidos Interactive, Core Design)

our right to make choices — our agency. Instead, the agency of a protagonist takes over, and we are swept up in observation of his struggle, more or less from his point of view, as though we were some invisible spirit or angel perched upon his shoulder, watching but

What excites me the most about Ken's work is the idea that I can create a character with a few simple brush strokes (personality, quirks, hidden flaws) and then unleash that character into a world and watch what naturally emerges from those traits. The chaotic interaction of this simple (but plausible and believable) character with its environment has the potential to drive empathy to a much higher level than nonlinear media because I'm not just an observer; I'm her creator. She is not only controlled by me (potentially) but her flaws and quirks were defined by me; she contains a part of me in a way that other media forms can only loosely approximate.

never interfering.

By way of contrast, look at games. A game does not force us to relinquish our agency. In fact, the game depends on it.

When you play *Tomb Raider* you don't actually think of Lara Croft as a person the same way, say, you think of Harry Potter as a person (see sidebar images). There is a fictional construct in the backstory to the game. But while you're actually playing the game, the very effectiveness of the experience depends on *you* becoming Lara Croft. The humanlike figure you see on your computer screen is really a game token, and every choice she makes, whether to shoot, to leap, to run, to change weapons, is your choice.

When you stop the game play momentarily, there is no sense that the personality of Lara Croft is anywhere to be found. While you're taking inventory, changing weapons, etc., the game figure on the screen stands impassively, and you know that the figure would stand that way forever if you were never to reenter gameplay mode. In other words, even a bare minimum of suspension of disbelief is not attempted. In fact, you are supposed to "become" Lara Croft — it is that immediacy and responsiveness that makes the game so exciting.

So let's compare Harry Potter to Lara Croft. When I am reading one of the Harry Potter books, and I put the

From Victoria Vesna's Online Response

Perlin's discussion of hyper-real responsive characters, that would presumably allow for a real actor with agency to emerge, does not explain the popularity of game formats such as MUDs and MOOs. These simple text-based early game genres (*Multi-User Domain*, and *MUD*, *Object Oriented*, respectively) were successful in working with the player's imagination, allowing for identification to happen on the basis of world-building and interaction with an online community. MUDs and MOOs are excellent examples of using words and stories that come from conventional literature in such radically different ways that an entirely new form of literature, if it can be called this, emerged.

<http://www.electronicbookreview.com/thread/firstperson/vesnar1>

book aside for a while, I can easily sustain the pleasant fiction that there is an actual Harry Potter, with a continued set of feelings and goals, living "offstage" somewhere. This is because to read Harry Potter is to experience his agency, as he navigates the various difficult challenges that life presents him. In contrast, when I walk away from my computer screen, I cannot sustain the fiction that an actual Lara Croft continues to exist offstage, because I have not actually experienced her agency. All I have really experienced is my agency.

Of course, linear narrative forms and games are intended to serve very different purposes. The traditional goal of a linear narrative is to take you on a vicarious emotional journey, whereas the traditional goal of a game is to provide you with a succession of active challenges to master. A "character" in a game is traditionally merely a convenient vehicle for framing and embodying these challenges. In this sense, a game is traditionally all about player control, since without active control, the player cannot meet the challenges that the game poses.

So how could the two forms, story and game, grow closer together? Well, to start, let's look at narrative structure. Here's a classic story arc: in the beginning, we are introduced to the basic characters, and some introductory conflicts are played out in small scale.

Perlin Responds

The main point on which I take issue with Vesna's response is her characterization of what I'm proposing as a sort of "hyper-realism." More accurately, I'm proposing a sort of "hyper-believability," as compared to the game genre in its current form.

<http://www.electronicbookreview.com/thread/firstperson/perlinr2>

Choices are made early on by the protagonists that have ramifications only much later in the drama (foreshadowing). Over time, the stakes get raised; the conflict becomes stripped to its essentials, culminating in a dramatic climax near the end. When the dust settles, in the release of dramatic tension that inevitably follows climax, there is a clear outcome.

Of course what I've just described is the basic gameplay of both *Monopoly* and chess. One obvious thing that distinguishes these games from narrative literature is that their protagonists are the players. In contrast, the conflicts in a work of narrative literature are played out by fictional characters, and the author's deeper purpose in building the narrative structure is generally to take the reader through the dynamic psychological journey of these characters. It was once said of writing narrative fiction that: "Plot' is the drugged meat that you throw over the fence to put the guard dog to sleep so you can rob the house." In other words, story is about conveying character. To do that interactively would require some sort of plausible psychological agency on the part of somebody within the interactive narrative.

If we look at "linear narrative" and "interactive game" as a dialectic, how can we really get into intermediate states along this dialectic? In other words, can we create a form in which the wall between "my agency" and "the

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2.sidebar.2 A screenshot from the PDA version of *Tomb Raider*. (Eidos Interactive, Core Design)

agency of an entity that seems psychologically present and real to me" can be removed or blurred?

But what exactly would intermediate agency look like? A fascinating insight is provided by Philip Pullman's trilogy of novels *His Dark Materials*. These novels take place in an alternate universe in which the soul of a person is an external, embodied entity. In this universe your soul is neither distinctly "self" nor "other," but rather an embodied familiar, or daemon, who always travels with you, who helps you to wrestle with choices, and with whom you can converse. Interestingly, the daemons of two people can converse with each other directly. If one imagines a similar relationship between a player and a character, this dramatic structure could plausibly lead to a form of creative work with is intermediate between "linear narrative" and "game," by enabling a psychologically present entity which is somewhere in between "me" and "other."

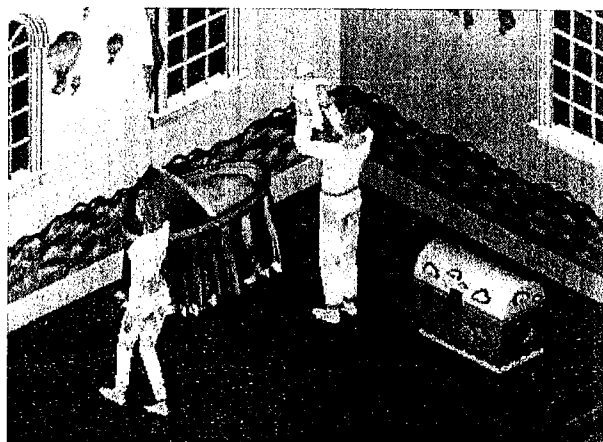
There has been some movement in the computer gaming world toward something that one could call "character." But these attempts have been hindered by the fact that characters in games can't act within an interactive scene in any compelling way. Of particular interest are "god-games" — those games, such as Will Wright's *SimCity*, in which the player takes a "God's eye view" of the proceedings. More recently, Wright introduced *The Sims* — a simulated suburban world in which the player nurtures simulated people, sort of as pets (see sidebar image). The player directs these virtual

people, who have no knowledge of the existence of the player, to buy things, marry, have children, take care of their physical and psychological needs, and so forth.

In a sense, the player is asked to take on some of the traditional role of an author — *The Sims* itself is more of a simulator toy than a game. By playing with this simulator, the player becomes a sort of author. As in many god-games, the player himself is expected to design much of the dramatic arc of the experience — it is up to him to starve or to feed his Sims characters, to introduce them, encourage them to acquire possessions or children. Given the current state of technology, it would be impossible to sustain the dramatic illusion if these characters were to attempt to speak to each other in clear English. For this reason, Wright has made the clever design decision to have the characters "talk" to each other in a sort of gibberish. This allows us to buy into the illusion that they are engaging each other in substantive conversations about something or other. In this way, *The Sims* replaces some social activity in its simulated world with the *texture* of social activity.

Playing *The Sims* is lots of fun, but one thing conspicuously lacking from the experience is any compelling feeling that the characters are real. Much of this lack comes from *The Sims*' reliance on sequences of linear animation to convey the behavior of its characters. For example, if the player indicates to a Sims character that the character should feed her baby, then the character will run a canned animation to walk over to the baby's bassinet, pick up the baby, and make feeding movements. If the player then tells her to play with the baby, she will put the baby down, return to a previous position, then begin the animation to approach the bassinet, again pick up the baby, and start to play. One result of this mechanical behavior is that there is no real possibility of willing suspension of disbelief on the part of the player as to the reality of the character.

The player ends up thinking of *The Sims* as a sort of probabilistic game, not really as a world inhabited by feeling creatures. A player quickly realizes that anything that happens that is not caused by his own agency is being caused by the equivalent of a set of dice being thrown inside the software, not through the agency of



2.sidebar.3. Caring for baby in *The Sims*. (Electronic Arts, Maxis)

thinking, feeling characters. *The Sims* remains, dramatically, a world-building game, not a psychological narrative in which one believes in the agency of the characters.

In the gaming world, one can also see a small step in the direction of intermediate agency in the game *Black and White*, a god-game in which the player has the use of embodied daemons to do his bidding. Yet the daemons in this game do not seem like interestingly real characters. I believe that one key reason for this is that the key ingredients of successful narrative film are simply not yet available for use in games.

In order to create a psychological suspension of disbelief, a visual narrative medium requires all three of the following elements: writing, directing, and acting. If any of these is missing, then a narrative on stage or film cannot provide observers with the essential framework they need to suspend their disbelief.

Of these elements, in computer games to date, acting has been conspicuously missing. Even in the most badly executed films (e.g., the films of Ed Wood) the essential humanity of the actors playing the characters somehow manages to come through. We believe the actor is attempting to convey a specific character within a specific scene, and we respond by agreeing to pretend that the actor has become that character, responding to the psychological challenges of the moment.

Yet imagine that film or theater did not have acting as we know it — but that instead all cast members

were constrained to act in the most rote mechanical way, repeating lines of dialogue and movements without any feeling that was specific to the scene (think of the mother putting down the baby only to pick it up again, in *The Sims*).

This is precisely the situation that game designers are faced with today when they foray into more narrative-based forms. If, as a creator, you have a nonlinear, interactive narrative structure, but it is embodied in such a way that acting is essentially nonexistent, then there is no way to create emotional buy-in for that character — the willing suspension of disbelief by the audience in that character's existence. *Myst* cleverly got around this by creating an interactive narrative in which there were no people (they were all gone before the observer shows up). But when the sequel *Riven* introduced actual fictional characters, the results were far less compelling, because it became immediately apparent that these were mere precanned game characters — windup toys — about whom the player could not really suspend disbelief.

A number of people have been working very hard over the years on “nonlinear” or interactive narrative. It is my contention that these efforts cannot move forward to merge film and games, and that we will not



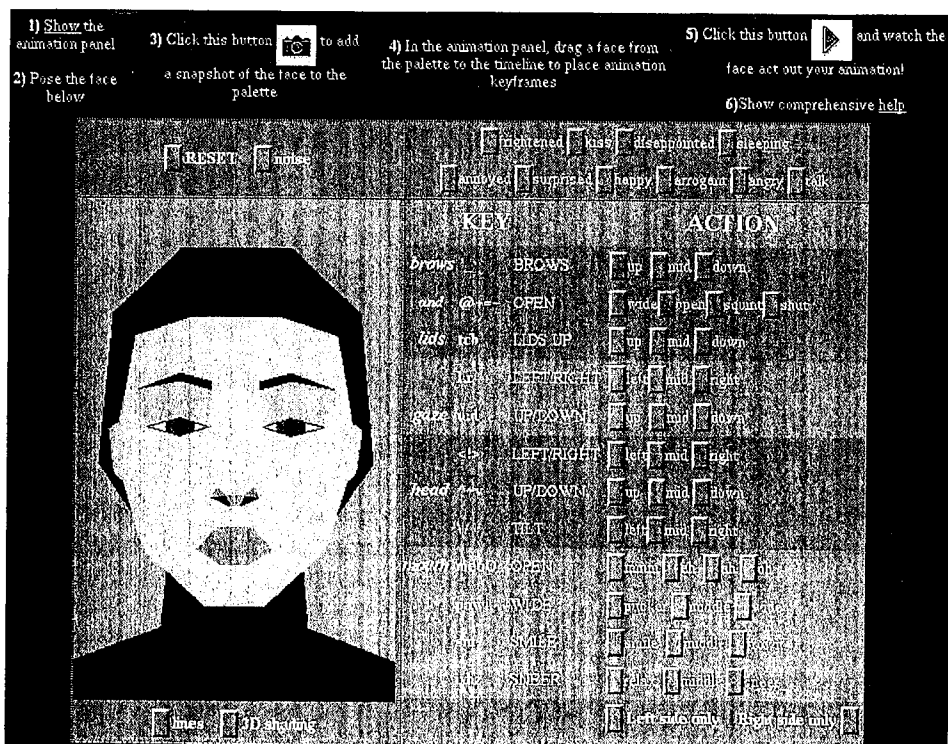
2.sidebar.4. A promotional image of Lara Croft. (Eidos Interactive, Core Design)

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1.1: NYU's Responsive Face.

be able to find a way to create an intermediate agency that will allow the viewer to find their way into caring about characters, until we provide a way that characters can act well enough to embody an interactive narrative.

For this reason, and to lay the groundwork for interactive media that are intermediate in the "agency" dialectic, a number of us have been working on various techniques for "better interactive acting ability" by computer-based virtual actors. This work involves body language, facial expression, rhythm of conversational response, varieties of ways to convey focus and attention between actors, and various ways to convey internal emotional states and awareness while playing a scene.

Right now, we're all in a learning stage, trying to figure out what works to make effective emotionally interactive actors. For example, presented here (figure 2.1) is the control panel for an interactive applet we made at NYU that teaches its user how to build a large vocabulary of facial expressions by combining a small

number of emotional primitives. You can see to the right of the face the basic elements of facial expression. Just above those are some example "presets" — complex facial expressions that are simply linear combinations of the lower-level primitives. Above that are some tools to let the user string together sequences of expressions to tell an emotional story.

Tools such as this one can help us to learn what works (or doesn't work) to make an effective interactive actor. With any luck (and some hard work), we will have good

interactive acting on our computer screens by the time the next edition of this book comes out. And that capability will, in turn, provide one of the key tools needed to properly explore the space of an interactive narrative form intermediate between story and game.

Reference

McCloud, Scott (1993). *Understanding Comics: The Invisible Art*. Lettering by Bob Lappan. Northampton, MA: Tundra.