

summer conference 2008



sparkling innovative learning & creativity

Conference Proceedings

Rachel S. Smith, Editor

Digital Storytelling: Old Ways, New Tools

Laurie Burruss | Pasadena City College

Digital Storytelling: Old Ways, New Tools

Laurie Burruss | Pasadena City College

Digital Storytelling: Old Ways, New Tools discusses narrative voice and explores many ways to tell stories and how to teach others through storytelling in the context of a diverse and evolutionary palette of digital communication tools. In all creative endeavors, in searching for what makes art and life work, and ultimately discovering what makes people connect, the answers lie in a story. Relying on both personal experience and field research, Laurie explores elements of storytelling that employ interactive techniques such as collaboration, immersion, connection, and engagement. With the availability of digital media tools, the audience rediscovers the meaning of collective experience—the evolution from Lascaux cave paintings to the Facebook wall. The power of digital storytelling in defining a brand, communicating a message, or connecting users draws upon old storytelling techniques like memory, emotional content, and active involvement. Rewards afforded to participants in stories intensify, alter, and change the beliefs about “living in the moment” and “the idea that resonates.” Narrative elements in combination with digital tools provide a structure for inventing an interactive design process focused on creativity and collective problem solving. Participants learn from shared stories, collaborate in making customized and individualized stories, and take away memorable experiences. Stories and their transformative powers, whether from a single voice or entire community, provide pathways to consistent, authentic, and successful creative communication.

Old Ways, New Tools

I have always loved a good story . . . Even as a child my memories of play were wrapped up in characters, plot, costumes, performances, and troupes of kids roaming the neighborhood. Kid’s play was all about the dress up box, make believe, baby dolls, Barbie dolls, paper dolls, forts and tree houses, one-of-a-kind, home-grown Halloween costumes, hand-written plays, puppet shows for hire at neighborhood birthday parties, a brand new box of Crayola Crayons, Saturday morning art classes at Phoenix’s Art Museum, and 3-day marathons of board games like Monopoly with the cousins at Grandma’s—that even today, in my memory, rival “World of Warcraft.”

Included in these childhood memories are stories read to me at home, in school, in movie houses. I grew up on these “old” stories: *Bible stories*, *Grimm’s Fairytales*, *The Secret Garden*, *Old Yeller*, the Disney animated version of *Snow White & the Seven Dwarfs*, *The Wizard of Oz* shown but once a year on television, Gene Kelley dancing in *Singing in the Rain*, and my favorite quest story: *Around the World in Eighty Days*. I learned the meaning of romance in *Gone with the Wind*, the ideas of epic and larger-than-life in *How the West Was Won*, and the sheer joy of singing along to every song in *The Sound of Music*. My first viewing of Stanley Kubrick’s *2001: A Space Odyssey* with only my Dad and myself was an introduction to the avant-garde.

Staple fare, on TV, included the kinds of worlds that only the most imaginative minds invented in classic but legendary shows like Rod Serling’s *The Twilight Zone*, *Alfred Hitchcock Presents*, and *The Wonderful World of Disney* (the weekly Sunday night family ritual).

My mother introduced me to theater. Nothing was so special as tickets to a live performance for a 12-year old birthday or ushering as a summer volunteer in a local theater or actually acting my first role for a high school play. Whether the original cast of *Oklahoma*, *West Side Story*’s contemporary take on *Romeo and Juliet*, Ethel Merman’s blasting out songs

in *Gypsy*, *Cabaret's* dark look at a Germany between wars, the 60's idealism of *Hair* or the power of fear incited by a young woman's hysteria in *The Crucible*, these stories transported me to places beyond my tract home in Arizona, to worlds of ideals, cultural values unlike my own, and unknown complexities of human relationships.

These stories were as "real" as my own day-to-day experiences. I frequently "lost" myself in these stories and literally delighted in this set of "other" possibilities and points of view. Through stories, I came to know myself and to understand my position in relation to the world. I was "hooked" on stories because they brought meaning and purpose to my own life, a sense of inter-connectedness instead of isolation, and a world where "dreams do come true."

In all my creative endeavors, in looking for what makes art "work," what makes life "work," what makes people "connect," it always comes back to a story for without a story, I have nothing, no hook, no reason to live. Without a story, a culture does not live. Without a story, history is not written. Without a story, voices cannot be heard. To make an example of another story, it's *The Emperor's New Clothes* all over again; substance and emotional content connect us all and anything less has no authenticity — that ability to "feel" alive.

Fifty plus years later, I found my voice and a way to tell stories and to teach others to tell their stories. I tell stories with new tools. I revel in the ways we tell our stories, share our stories, listen and connect to each other. All I ask for in return is to engage me!

In the mid-nineties, in a workshop at the Center for Digital Storytelling (<http://www.storycenter.org>), in Oakland, California, I arranged for two college instructors — one a web designer, one an artist, a filmmaker, a musician and a non-profit administrator — to join together to tell stories using images, voice narration, and the new digital video editing tools available on the computer. Joe Lambert, our guide and critic and facilitator through this process, pressed for the story's voice, for its truth and the truth's power to communicate to others. Although this workshop was intended to prepare a diverse group of artists and educators like myself to teach digital tools, image making, and writing to junior and senior high school students in the Los Angeles area, I discovered my own personal voice in searching for the story of my father's captivity in a prisoner of war camp during World War II — *Bill's Voice*.



My father kept a diary during his internment but the entries amounted to his favorite songs, favorite meals cooked by his mother, gear he needed for camping trip, and a dictionary of commonly used G.I. slang. He never talked to me about this experience while he was alive and he died when I was 21. Indeed, I felt short-changed, but through the Internet, I found several community websites authored by ex-prisoners of WWII and retired Air Force Officers. These strangers, seeing my emails pleading for any information about my father, about his plane being shot down, and about his circumstances in the prisoner of war camp, not only researched his actual records in the Air Force but actually connected me to the Commanding Officer who witnessed and oversaw the operations of the bombing mission on the day my father's B-52 was shot down. Within 48 hours of sending out two emails, my father's story unfolded through the words of the men with whom he had shared these experiences. I even received an email from a Belgian gentleman who, as a child, lived in the small northern German village bordering my father's prisoner of war camp. He wrote "because of people like your father, I live in a free world today." He described my father as a "hero" and made me cry and changed my perception of my father forever. This story could not have been told 15 years ago because the Internet did not exist. These retirees brought my father's voice to me and demonstrated how the democratization of the Internet lends power to the voice of one and reinforces the collective spirit. I realized that I will never hear my father's words but with the digital tools of Photoshop, Final Cut Pro, and SoundStudio Pro, I found the voice — my own voice to tell my father's story. This incident prompted my research into answering the questions "What makes a good story?" and "What role does narrative structure play in the design and development of interactive experiences?"

What makes a good story? Ten essential elements of storytelling define the process for creating, making, and distributing digital stories. These ten elements establish a process for designing and developing story concepts, methods, tools, and distribution. A discussion of each element follows with “real world” examples illustrating the principles and actualization of “successful” stories. They include:

1. Point of View
2. A Dramatic Question
3. Emotional Content
4. The Voice
5. Juxtaposition: Text & Image
6. Rhythm, Tone and Tempo
7. Narrative Structure
8. The Audience
9. Immersion, Connection, and Engagement
10. Backstory

Element 1: Point of View

Point of view identifies the central premise; defines the specific realization you are trying to communicate within your story; services every part of the story; and clarifies the story’s purpose. With an established point of view the goal of the story becomes clear. Point of view asks who is telling the story and what is the motivation or the “why” for telling this story. As Joe Lambert, from the *Center for Digital Storytelling*, points out “...all stories are told to make a point.”

In understanding point of view, ask the question, who tells the story? Generally most stories are told by one of the following options:

- first person (the use of “I”)
- second person (the use of “you” as though someone is speaking to the audience)
- third person (the outside voice uses the pronouns he, she, or it)
- dialog (more than one voice tells the story, multiple points of view)

Examples:

- A black and white photo of my mom at age 8 playing dress-up compared to a lithograph of the same photo of my mother but instead of a baby doll a portrait of myself at 21. The caption reads *Me at 21 trying to figure out who I am going to be when I grow up?* At 21, my mother had just had her first child, myself, but I at 21 was unclear and searching for my role as an artist and woman. I felt like I still belonged in the baby carriage in some ways.



- *Looking at Paintings: J.Paul Getty Museum*

Second Story Interactive Studios, <http://www.secondstory.com>

This instructional movie explains how the point-of-view held by Cezanne in his still life paintings is based on experience and memory rather than on realistic and physical reality. Cezanne’s point-of-view connects the viewer to the objects emotionally and speaks to experience rather than pictorial accuracy.

- *Next Exit > Home Movies > Turn*, by Dana Atchley, performance artist and interactive digital storyteller. Dana’s first-person story recounts the annual ritual of making a 360-degree turn in front of an 8mm camera. (<http://www.nextexit.com>)

Element 2: The Dramatic Question

What's my motivation? What question needs answering? Developing a dramatic question often defines the conflict, the reason for the story, the why and what and its resolution. Asking questions is a great way to brainstorm ideas for stories and see if they hold interest. Creating lists of questions whether the answers are known or not can start the ideation process. Many of the oldest stories answer questions such as Why is the sky blue?, Where does rain come from?, Who is faster — the tortoise or the hare? Most audiences want to hear a compelling story, one that uncovers a theme that powers that story, and then to be convinced of its value.

"What's the story?" is often the best thing and the first thing to ask in story development. Hillman Curtis points out in his book *MTIV (Making the Invisible Visible)* that . . .

In sum, listening is an activity. It's a matter of asking the right questions in just the right way and then fine-tuning your reception to the answer, however buried it may be. . .uncover what they want most. You really do have that kind of power.

Example:

Falsies, by Daniel Weinschenker, writer and teacher, Center for Digital Storytelling, <http://www.storycenter.org/canada/falsies.html>

Daniel's story describes his mother's abusive relationship with his grandmother and her journey to reasserting her womanhood with the help of her son. The dramatic question that prompted his mother's story is "Why hadn't anyone ever told her she was beautiful?"

Element 3: Emotional Content

Emotional content is powerful but only if the emotion is truthful in its approach. Tragedy and comedy describe the full gamut of the emotional spectrum possible in storytelling. Seeing, feeling or hearing authentic emotional content effects the listener literally — like a tightening of the stomach, the eyes brimming with tears, and an unlocking of inner emotions and personal experiences. The power of emotion lies in its ability to resurrect, inspire, transform, express, and feel.

All of us have experienced being in the middle of a story, a novel, a film, a theatrical or storytelling performance and finding ourselves emotionally engaged. The story reaches inside our consciousness and takes hold of us. ". . . Stories that resonate give us a reason to go forward" states Joe Lambert, Center for Digital Storytelling, <http://www.storycenter.org/index1.html>.

Example:

AIDS Decade: Looking for the Light > Venus Rising

Journal E 1999 <http://www.musarium.com/aidsdecade/venus/index.html>

Scott, a photojournalist, becomes involved with a drug addict who has AIDS but chooses death on her own terms. The story resonates emotionally in its simplistic and straightforward approach to discussing life, death, love, and friendship. Having watched this story multiple times, I am always brought to tears.

"Venus was one of the best friends I ever had. Venus was always there for me. We have very few people who are actually friends in our lifetime." Scott Thode

Element 4: The Voice

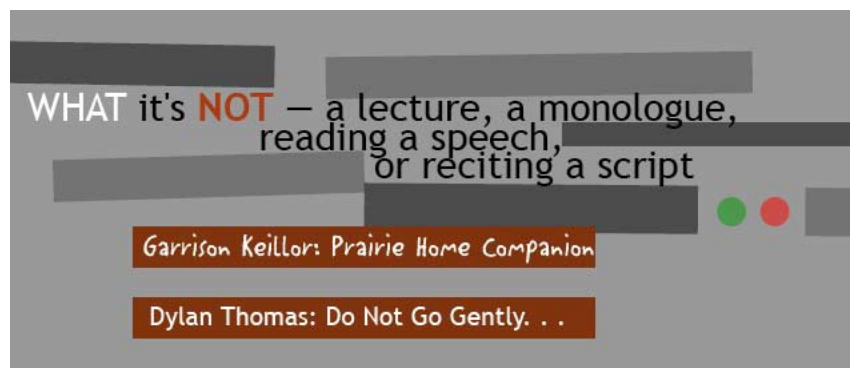
Two aspects exist in understanding voice — both the words that are spoken with various inflections as well as the different modes of listening. A good listener hears more than voice and sound but can identify “clues” that place the audience inside the story in terms of:

- Age
- Place
- Gender
- Emotions
- Patterns of rhythm
- Cadence
- Pitch
- Volume
- Character

To really understand “voice” is to understand what it’s not! Voice in storytelling is not a lecture, a monologue, reading a speech, or reciting a script.

Examples:

- Garrison Keillor: *Prairie Home Companion* – the familiar voice of home, humor, and wisdom.
- Dylan Thomas: *Do Not Go Gently Into That Good Night* – The rhythm and cadence of the poetry, the drama of the tone, and the emotion of the



voice’s tremolo enhance the meaning of this poem recited by the author himself

- *Modern Man*, by Mike Goedecke, Belief (<http://www.belief.com>)
In an experimental motion graphics movie, Mike Goedecke and his team record the voice of a schizophrenic homeless man in Venice Beach and illustrate his wild musings with animation and graphics.
- *Redheads*, as told by Dana Atchley’s mother, Barbara French (<http://www.storycircles.org/play.php?vid=271>)
Barbara’s voice as an older woman contrasts to her recounting her early womanhood.
- *L.A. Dada*, by David Mascarina, Pasadena City College Block, Investigating the Los Angeles Landscape, (<http://www.pasadena.edu/dmc-pcc/dada/html/dm/>) David employs the voices of over 12 students to illustrate the poem’s celebration of the diversity of Los Angeles.

Element 5: Juxtaposition: Text & Image

“Together, of course, words and pictures can work miracles. And indeed, words and pictures have great powers to tell stories when creators fully exploit them both!” *Understanding Comics*, Scott McCloud

As McCloud suggests, the juxtaposition of elements both visual and written opens up possibilities for new meanings, suggests new interpretations, and in storytelling particularly allows the storyteller to composite a variety of media and “paint” a picture with texture and contrast. Juxtaposition allows for sensory experiences. When the user sees the image and reads the word, the power of mental imagery housed within the brain adds a set of sensory experiences — feeling, hearing, touching, smelling, seeing, etc. Rich media experiences often trigger mental imagery with just a few images and words. This type of thinking draws conclusions and makes connections and new meanings between seemingly disparate elements. A storyteller’s imagery and text acts as a catalyst for a richer experience.

The front of a black and white photo of my Aunt Betty hanging from a swing set raises the questions: What does this mean? When? Who? Why? Typically the answers, upon seeing only the photo image, are a young woman in an older time. However upon turning the photo over, one realizes the message, handwritten in blue ink, reveals more of the



Aunt Betty

character and the story. "There just is no explanation for this. I guess I just ran out of things to do and felt like 'showing off.' Where did you get such a ca – ra – zy wife — or at least why?" Now, the audience can assume that the young girl/woman is stir crazy, is married, and the husband is not around. The clues indicate she is possibly a war bride. The narrator adds that Aunt Betty who is now 88 upon seeing the photo of herself at 18 years of ages comments, "I had just found out I was pregnant and Jack was sent off to the war." With the text, the image, and the narration, the story becomes one about a defining moment: a girl becoming a woman and relishing her last childish act.

Examples:

- *Ceci n'est pas une pipe.*, Rene Magritte. Magritte's surrealistic humor is in play when the title and the image of this famous painting are "seen" together. The painting is not really a pipe but only a representation of a pipe.
- *Seven*, Kyle Cooper, Imaginary Forces. The motion graphic titles for the movie *Seven* offer clues to the seven deadly sins or in this case the seven murders that occur in the movie to follow. <http://www.imaginaryforces.com>



- Trailer for *Infinity*, Belief. The motion graphics company Belief attempts with animation, motion, text, and image to depict the concept of infinity for which no real pictures or documentation exist. The idea of depicting what we cannot actually see or experience makes this video so compelling. <http://www.belief.com>

Element 6: Rhythm, Tone and Tempo

As Ernest Hemingway suggests, "Write the story, take out all the good lines, and see if it still works." Great storylines have pacing and rhythm that move us through the story, quicken our breath, make us gasp, clench our hands, and sigh with relief as the credits roll. The pacing of a story controls the flow of action. This pacing, rhythm, tone, tempo, beat, filter in combination with animation and soundtrack suggest:

- A sense of place
- Ambiance
- Time period
- Inhale/exhale
- The beating of the heart – nature's own iambic pentameter.

Examples:

The following examples are masterful in their pacing and in creating and supporting dramatic structure and character development. Each example uniquely approaches timing and plot through animation, sound effect, special effect, art direction, or orchestration.

- *Toy Story*, the movie trailer: PIXAR, the new Disney
- *Let X = X*: Laurie Anderson, Artist and Musician
- *Twin Peaks*: David Lynch
- *Star Wars*: George Lucas, ILM (Industrial Light and Magic)



Element 7: Dramatic Structure

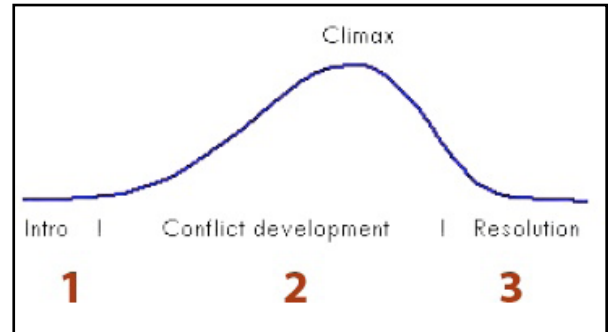
To see the best examples of narrative dramatic structure, view the TV Commercial with its 15/30 second time constraint in combination with tight editing and strict adherence to dramatic structure. Dramatic structure is about clarity, beauty, and focus.

Three is the magic number for creating contrast and creating a beginning, middle and end of a story. In art and design, the magic three elements are foreground, middle ground, and background and light, medium, and dark. Contrast (when it includes three elements not just two) tells the story and sets the stage by helping the audience. As a digital storyteller, in terms of the audience:

1. Lead them in.
2. Tell your story.
3. Then let them out.
4. Leave them thinking.

The classic dramatic curve in writing courses parallels the actions outlined above:

1. Intro
2. Conflict development
3. Climax
4. Resolution



In judging the success of a story's dramatic structure graph the structure in simple line drawings and ask the following questions:

1. Does the story graph look the most exciting (peaks)?
2. Does the story graph look boring in parts (flat-lining)?
3. Does the story graph have a "false" start (peak, fall, and try to resurrect itself)?
4. Does the story graph look like your favorite dramatic structure?
5. Should we throw out the structure completely and return to the drawing board?

Examples of dramatic structure:

- *Simon*: Hillman Curtis <http://www.hillmancurtis.com>
- *The Coca Cola Stories: A Branding Strategy* <http://www.thecoca-colacompany.com/heritage/stories/index.html>
- *Wizard of Oz*: Fed Ex/TV commercial http://www.youtube.com/watch?v=yy4_Dd-tmKQ&feature=related



Element 8: The Audience

In *MITV*, Hillman Curtis defines audience identification as the ability to "Zero in: Before anything else, we have to know who our audience is and what they want." Ask yourself who is listening. Then answer the question honestly to identify and target the audience. Targeting the audience also helps in identifying the appropriate distribution medium, and finally the message (Remember Marshall McLuhan's adage: The medium is the message!) Once identified and profiled, the target audience determines media choices that effectively communicate the story (for what else is brand if not a story about the company). Audiences typically relate to one or more of the following media choices:

- | | |
|-------------|--|
| Speech | Writing |
| Art | Internet (email, IM, Facebook, etc) |
| Music | File sharing |
| Radio | Video conferencing |
| Television | Peer-to-peer networking communities (blog) |
| Movies | Cell phone, mobile devices, G3 |
| Video Games | |

Example:

- *Target Painting*: Jasper Johns
Media Examples – TV, Radio, Movie Theaters, Drive-in Movies, Atavars in Second Life

Element 9: Immersion, Connection, and Engagement (suspension of belief)

"Interactivity is based on fascination and captivation. It is how people get pulled into a process that continues to draw them deeper and deeper," states Mark Stephen Meadows, *Pause & Effect*. Compelling experiences immerse the audience, connect the audience with each other, and engage the audience in a way that makes them forget everything else but what's happening at the moment. Anyone who has attended an evening of Blue Man Group in Las Vegas, or seen a Bill Viola video installation, or watched a live magic show like Penn and Teller knows the feeling of complete engagement and the suspension of belief — when all that matters is this moment. The "gotcha" moment indicates the audience is enchanted and completely immersed in the interactive experience of the story. Pablo Picasso stated, "I begin with an idea, and then it becomes something else." The successfully engaging story follows suit; it begins as a kernel of an idea, then turns into something else — another reality for the user or audience over a temporal amount of time.



Examples:

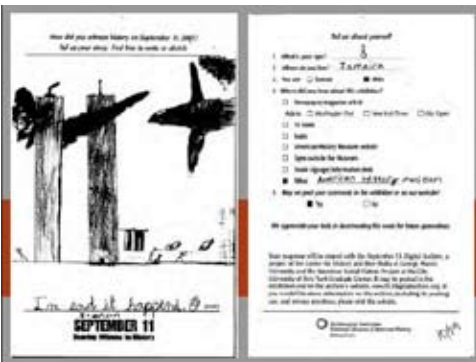
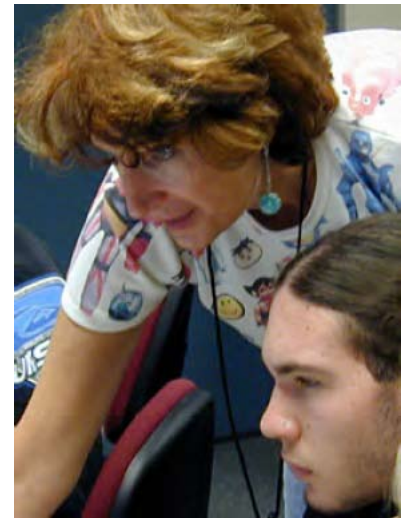
- *Water*: Bill Viola
- *Magic*: Penn & Teller
- *The Sistine Chapel Ceiling (close up of God's and Adam's fingers touching)*: Michaelangelo
- *Time to Start*: Blue Man Group (video audience performance)

Element 10: Backstory

Backstory is the journey—the path to our stories. Sometimes it becomes the story, but generally backstory, the processes behind our storytelling that evolve into stories as the creator/designer collects assets, collaborates with team members, and connects with the targeted audience. The storytelling development process provides a rich set of experiences and opportunities for future stories and interactive experiences in the very nature of collecting, collaborating, and connecting, three of the most personally rewarding experiences for the interactive storytelling designer.

Examples:

- *They Need to Make New Words for This* (poem in response to 9/11): Pat Rees, PCC Web Producer, Flash Motion Graphics [http://www.pasadena.edu/dmc-pcc/Poetry in Motion > Class Projects > Poetry > Pat](http://www.pasadena.edu/dmc-pcc/Poetry%20in%20Motion%20Class%20Projects%20Poetry%20Pat)

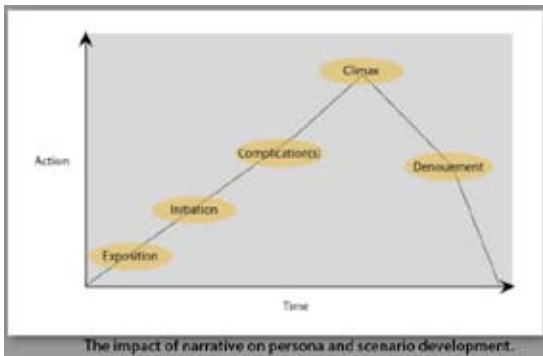


Some real world examples of back story as illustrated in the aftermath of 9/11:

- *September 11: Stories from Exhibit Visitors*, Second Story Interactive http://911digitalarchive.org/smithsoniancards/visitors_story.php?id=7
- *September 11: Bearing Witness to History: Pentagon Photographs*, by Michael Garcia <http://americanhistory.si.edu/september11/collection/record.asp?ID=24>
- *Mr. Beller's Neighborhood*: Manhattan Stories/Interactive Map and Stories <http://www.mrbellersneighborhood.com/>

Next Exit: Interactive Design & Story

"When we refer to digital, we are talking about a utility . . . a tool. We have been given a new set of tools to create and share our stories. The tools are extremely diverse; there are the software, the hardware used, and the actual publishing and dissemination media." Dana Atchley, Next Exit, <http://www.nextexit.com> With this set of tools what are some next steps in the evolution of digital storytelling?



"By making a conscious effort to integrate narrative into our work, we are better able to support creative learning, problem solving, and task completion. At the very least, the experiences we create will be more engaging, both for the project team creating the experience and for the end users. While academic ideas have tended to be realized in immersive user experiences (think gaming, edutainment, and pure design), there has been little exploration of narrative for mainstream (think commercial) interactions, the kind of projects we . . . most of our time designing. The contemporary model of rising/falling dramatic action lends itself to the kinds of user experiences we are creating and helps us to convey those

concepts to our clients and team members."

Use of Narrative in Interactive Design, by Nancy Broden and Marisa Gallagher and Jonathon Wayteck on 2004/10/28

http://www.boxesandarrows.com/view/use_of_narrative_in_interactive_design

Next Exit: Narrative in the Design Process

View the above website to see an excellent illustration of the impact of narrative on persona and scenario development, the application of narrative structure in the interactive design process.

Example:

- Where do ideas come from? How do we get ideas? How does we develop a creative process?

CHAIN Reaction, Belief, Mike Goedecke and Kane Roberts <http://www.belief.com>

Rube Goldberg, The Mouse Trap Game, The Honda Commercial – Side by Side Ideas



Next Exit: Future Storytellers — Areas of Growth

Current and future areas of most growth in the application of digital storytelling methodology are, as follows: game design, graphic and episodic novels, interactive mapping and tours, mobile applications, and community-based collaboration. Developing downloadable apps for the iPhone, designing casual games for mobile devices, new students are focusing on a whole new set of interactive experiences, applying episodic elements to storytelling, involving community and peers in collaboration, and creating messages and experiences that call people to solve global problems such as environment, world health, illiteracy, etc. Other areas of interest include storytelling as an interface device with mapping services, way finding, interactive tours, field research experiences, and interactive educational activities that are location-based.

The apt motto of the inspired digital storyteller is "To infinity and beyond. . ." — a theme found in *Toy Story*. These new students of storytelling have a hopefulness and drive that makes teaching and challenging them a learning quest in and of itself.

Next Exit: Memory — The Take Away

Memory: The important take away or free prize at the end of every story! Great interactive digital storytelling mandates that every user takes away a memory, an experience. Success of the story is measured in a story's gift — a memory, an interactive experience, a shared collective moment, a sense of immersion in a time and place. This gift cannot be lost, cannot be taken away or stolen, and cannot be bought. Memory is a user affordance that allows the user or the audience member or the listener to think, add, expand, and relate his/her experiences to all that has come before and will come after.

Conclusion

To complete the cycle of starting with the individual, moving out to the family, the friends, the community, the college, and the world at large and sharing stories that have meaning and have transformed my thinking and teaching and interactive design process, I end with a story. The title of this new story is *Where Now*. My work continues to address image and text, art and meaning, and all the new digital tools and communication technologies as well as the ageless storytelling forms. My focus continues on **collaboration, community and collective experiences**. In the future, I see possibilities in the following ideas:

- Larger than life and its magical effect — the whole is greater than the sum of its parts.
- Accessibility on the Internet — the great communication load leveler, democratization of the message and the voice.
- Immersion, Connection, Engagement — the real possibility of global communication.
- Memory & Experience — the unforgettable moment and its power to teach.
- Authenticity — the Truth that makes us free and gives us confidence to “speak.”
- Living in the moment—the now factor.
- The ripple effect – ideas that “percolate” and “ripple” outward from the source.
- The ultimate human qualities – motivation, expectation, ability, flow, and culture!

A good story leaves you wanting more. A good story leaves you insatiable. A good story compels you to tell your stories, to listen for new stories, and to experiment with new tools and ideas of storytelling.

About the Author



Laurie Burruss is the Director of Pasadena City College's Digital Media Center (<http://www.pasadena.edu/dmc-pcc>). She has taught interactive multimedia design for over 15 years and developed an industry standards curriculum in Interactive Multimedia Design. Partnerships include Warner Bros, Inc., Disney, Lynda.com, Adobe, Apple, and NMC.org. Her program has received many awards and grants funded by NSF, CTEA, and the California Chancellor's Economic Workforce Development initiative in Multimedia & Entertainment. Laurie received her BFA and MFA from the University of Southern California in Fine Arts, and is currently authoring a project-based title for Dreamweaver CS4 @ Lynda.com.